

EMPIRE DRILLS



EMPIRE DRILL COMPANY

DIVISION

AMERICAN SEEDING-MACHINE COMPANY

SHORTSVILLE, NEW YORK.

EMPIRE

Seeding Machines

Consisting of
DISC
HOE
SHOE
DRILLS

*Plain Grain and Combined
Grain and Fertilizer*

Fertilizer Distributors
Corn Drills

MANUFACTURED BY
EMPIRE DRILL CO.

Division American Seeding-Machine Co.
SHORTSVILLE, NEW YORK, U. S. A.

Introduction.

FOR more than fifty years the Empire has been doing a grand work in making America the greatest grain-raising country in the world and lessening the labor connected therewith.

The fame of the Empire Drill has gone abroad into other countries, and each year finds the Empire in new fields doing satisfactory work. The reason for this is expressed in one word—"merit."

During all these years we have been keeping abreast of the times—anticipating the demands of grain growers everywhere. We are constantly conducting exhaustive experiments with devices that lessen labor and produce better results. When a new device has been adopted, our patrons have the assurance that it has been thoroughly tested, and that we stand back of it with a liberal guarantee.

The material that enters into every implement branded "Empire" is the best the market affords; the workmanship is all high class and the finish perfect. This means a long life for the Empire and satisfaction for the buyer.

We purchase our materials in such large quantities that we get the best material and lowest prices. These conditions enable us to offer high-class implements at the lowest possible prices.

We have endeavored to clearly illustrate and describe the many good things in the make-up of Empire implements. But should more information be desired than is contained in this catalogue, we will be pleased to give it. If you do not find just what you want, do not hesitate to write and tell us what it is. We can supply your needs. Your questions will not trouble us.

Empire Drill Company

DIVISION

Shortsville, N. Y.

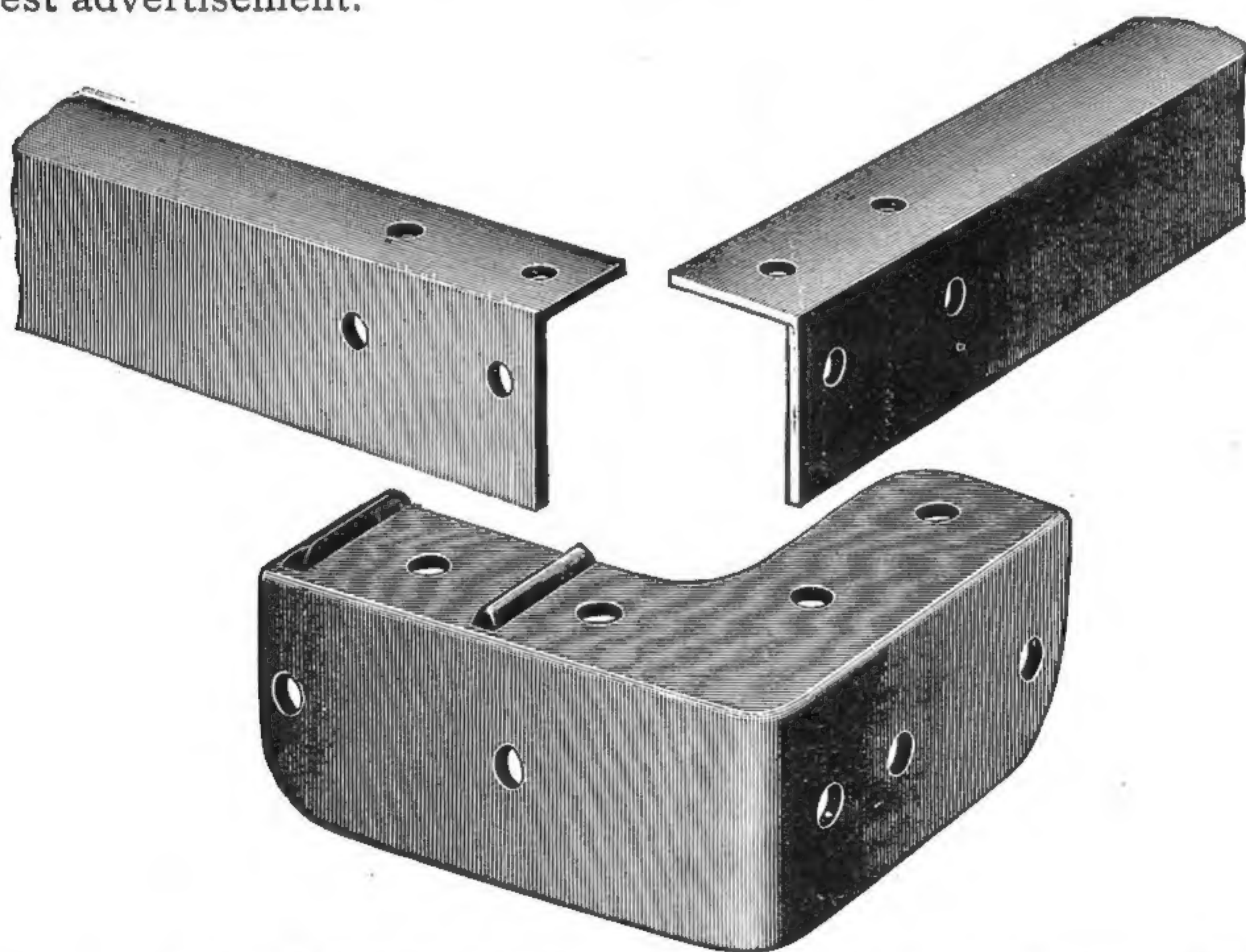
General Construction of Empire Drills.

Empire Drills

Are manufactured in a great variety of Hoe, Shoe and Disc styles and sizes, for two or more horse power, many features of each being common to all, such as the feed, frame, axle, wheels, etc.

Crude Material

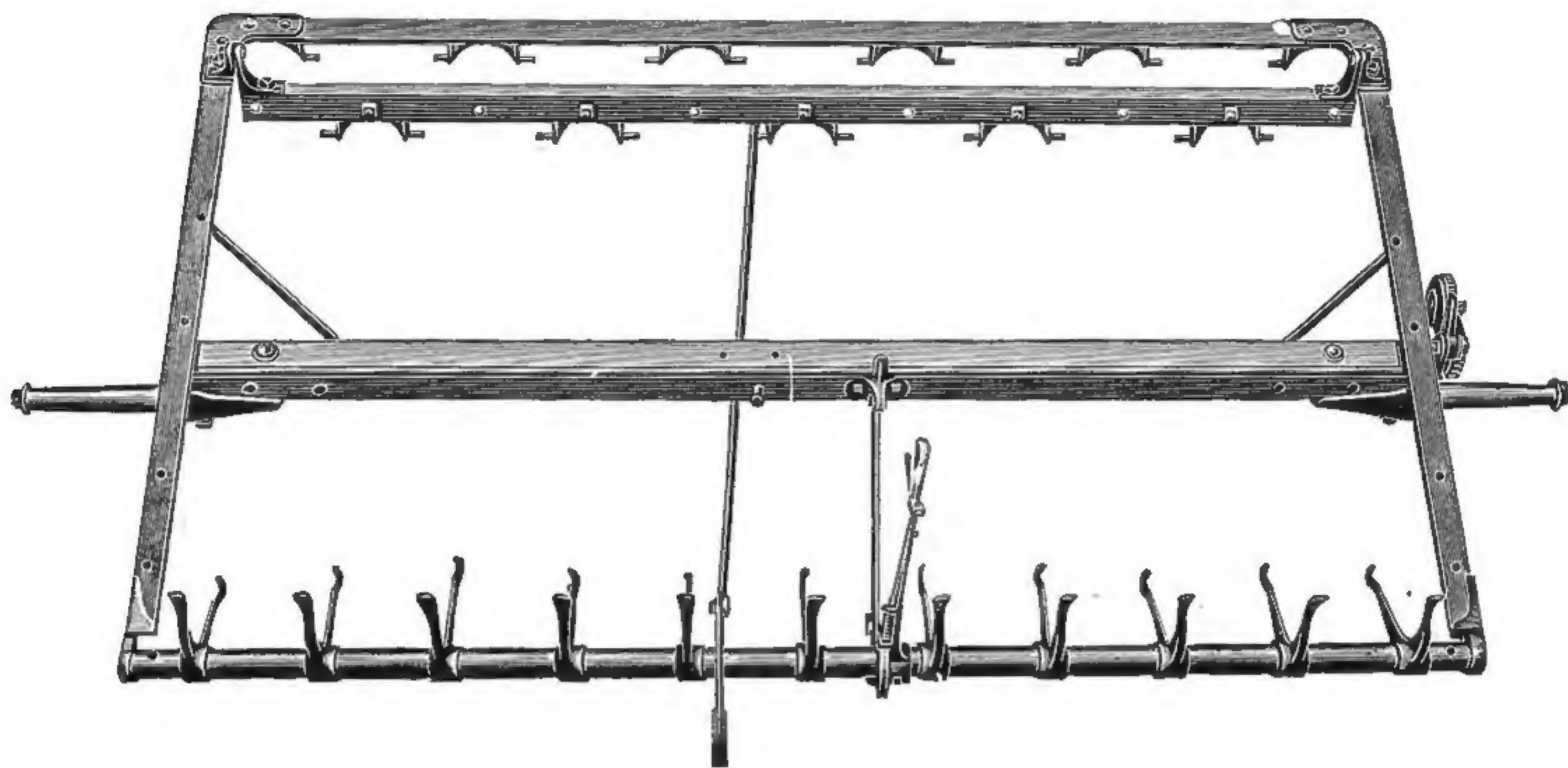
Is different. Qualities of pig iron, steel, wrought bar, malleable and gray castings vary. A wise and careful selection of these very important materials by the manufacturer means much to the farmer, as it has everything to do with the durability of the machine. The best grades of farm products command the highest market price. The best grades of all kinds of crude material also command the highest market price, and when best grades are used in the manufacture of Empire drills, the machine costs more to build, but they are just that much better. We use nothing but the highest grades of material. Lower grades may LOOK nearly as well when painted in the machine. The actual test comes in continued use in the field by the farmer. "Time is the true test of merit." The EMPIRE has been made in this manner for over fifty years. Our farmer friends' verdict is our best advertisement.



Frame.

On all Empire drills we use a steel frame, composed of three pieces of angle steel. The end pieces and front are cut to the proper length for each size drill, joined at the proper corners and held firmly by malleable iron clips; at the proper distance back they are tied together by the bed rail, from the ends of which to each end piece a brace is bolted, making a solid, substantial frame, which can be repaired, if necessary, by anyone.

General Construction of Empire Drills.



A solid foundation is of much importance in the construction of a grain drill. This foundation may be properly called the frame. EMPIRE frames are rigid and strong. Lightness, strength and durability have been combined in a practical manner, producing what we believe to be a steel frame that has stood the most severe tests and proven itself to be thoroughly reliable in every way.

Draft. EMPIRE Drills are light draft and easy running, therefore easy on both man and team. Note from cut of frame how the wheels are hung—on taper steel axles that have the proper pitch and gather, run freely on the axle, snug up to the shoulder, always remain in the right position. Would you buy a wagon on which the wheels did not have the proper pitch and gather? WHEELS on the EMPIRE are hung correctly, insuring LIGHT DRAFT and perfection of wear on the axles. The principle applies to a grain drill with as much force as to a wagon, and should not be overlooked in making a decision as to the purchase of a drill. It is a distinctive EMPIRE feature.

General Construction of Empire Drills.

Wheels. Upon the wheels of a grain drill rest the greater part of the load, and they should therefore be of good material, well and strongly built.

The wheels with which Empire Drills are regularly equipped are of wood, strong and heavy, with wide rims, 3-inch tires and heavy iron hubs, built by our own wheel makers, from thoroughly dry, straight grained and sound stock, seasoned in our own lumber yards, each and every part being rigidly inspected.

Each spoke is dipped in oil before being driven into the iron hubs the tires are cold set by machine, the dish in each wheel is exactly the same, and finally are painted with two coats of paint and heavily varnished.

They are built upon honor, for hard and lasting service, and a better wheel is not built.

We can furnish heavy metal wheels with 3-inch tires and staggered spokes, when desired, without additional cost.

We favor wood wheels because they carry up less dirt in operation—turn corners easier, and when built on honor will wear as long as steel wheels.

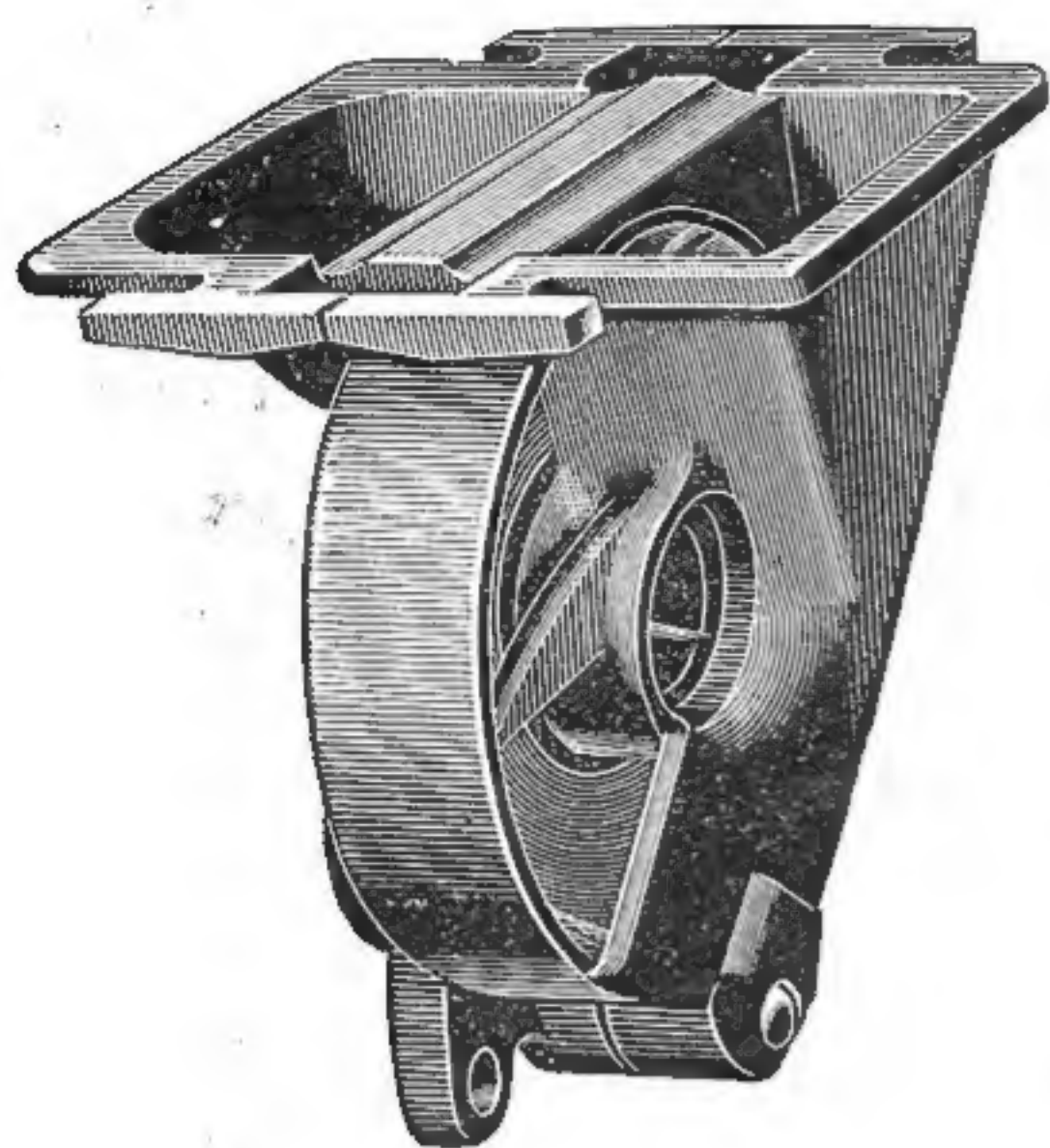
Roll and Handles. This arrangement is different from all others and is peculiar to the Empire. It is operated by a lever near the center of the drill, giving a back rolling action, taking up the slack of the chains and lifting the hoes. Each hoe may be raised independently if desired.

Hitch the team on as carefully as to a wagon, seeing that neckyokes are strapped fairly tight and that there is not too much lateral motion to the pole, drive straight and the results will be satisfactory.

Empire Double Run Force Feed. The vital principle of the famous Empire Feeding Device is so simple and easily understood, and its work so accurate that it is a favorite on thousands of the best farms.

The accompanying illustrations show its construction.

General Construction of Empire Drills.



The complete feed run as used on all Empire Drills. It is composed of four pieces, screwed firmly to the bottom of the box, and held together at the lower end by a bolt.

Two floppers are attached at the top of each feed run and at the bottom of the wood hopper for the purpose of closing either the large or small side for sowing grain or peas and beans; or both sides of any particular run may be closed as desired.

The complete device is fitted sufficiently tight to prevent the leakage of small seeds, such as flax, hemp, Hungarian or millet, for the sowing of which we furnish, at a small additional cost, a reducing device for small quantities per acre.

The flange of feed wheel is the bottom upon which the grain rests, and as it is steadily moving, a solid, compact mass of grain must be carried—not pushed or rolled, but carried—into the conductors and planted in the ground.



Facts, Not Fancies.

The Empire Feeding Device does not discriminate between different grains, but only requires a change for different quantities. Its motion is continuous and positive; its feeding channels unalterable; its capacity covering the range of all requirements on the farm; its construction simple; its accuracy of distribution unerring; and its reliability lasting and permanent.

To appreciate the sense and meaning of this statement, and its value as applied to a mechanical device for the sowing of grain, it must be understood and comprehended that the weight per bushel of different kinds of grain does not enter into the question in the least. A bushel of wheat and a bushel of oats differ greatly in weight, but so far as measurement goes are identical, and it is the faultless quality in the Empire which enables it to handle them in like quantities without change of adjustment, as accurately as a farmer can with a half bushel measure.

General Construction of Empire Drills.

Quantities Sown. Each rotation of the feed wheel empties as much grain as it holds, with two revolutions twice as much, and so on.

With each drill gear wheels are furnished, with directions for using, which will sow from 24 quarts to 128 quarts of grain per acre, with 18 intermediate variations, or twenty different quantities in all, covering the ordinary range desired by farmers generally.

We can, at a small additional expense, supply gear wheels to sow more or less than those quantities, going as low as 8 quarts or as high as 8 bushels per acre.

With each drill gear wheels are also furnished, with directions for using, which will sow from 59 quarts to 236 quarts of peas per acre, and from 14 quarts to 56 quarts of beans per acre. Gear wheels can be furnished for sowing larger quantities when desired.

The large quantities of peas which can be sown with an Empire Drill is of particular interest to farmers who sow this crop for canning factories. Hundreds of Empire Drills have been sold for this purpose solely.

It is reliable, because there is no guess work about it. Of all work on the farm, the PLANTING OF SEED should be MOST CAREFULLY WATCHED AND ACCURATELY DONE.

It is positive and accurate as the sealed half bushel; it controls and measures the grain.

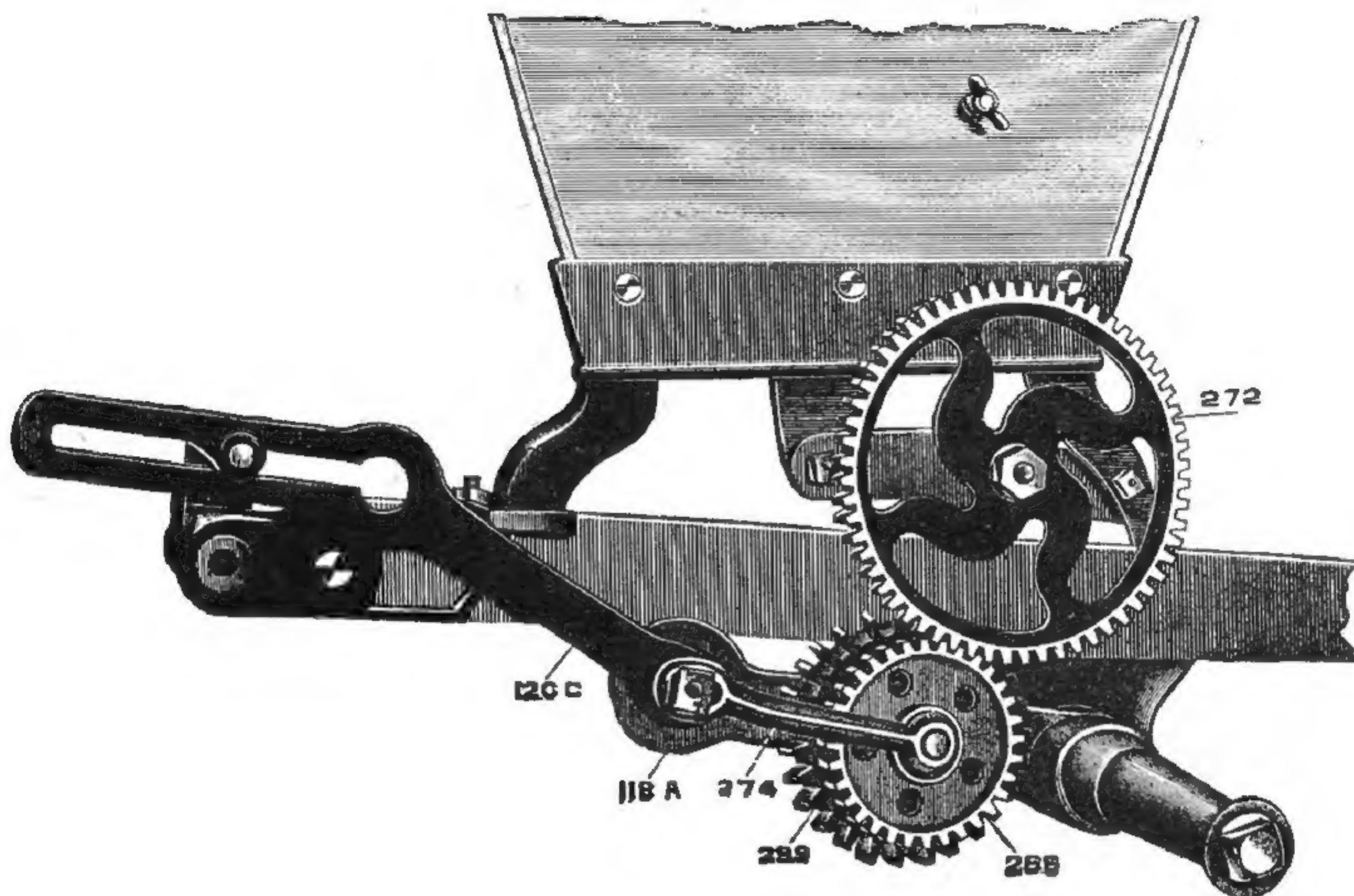
Position does not affect it. It sows the same quantity going up hill or down.

Its motion is slow, wear slight, repair cost small, and it will do as good work after long service as when new.

It sows wheat, rye, barley, flax, oats, peas, beans, corn, pumpkin seed and sugar beets, or any seed ever sown with a grain drill.

We are prepared to furnish at a slight additional cost an agitator attachment for sowing bearded oats, beet seed, etc., different from any other in use, which will do the work in a satisfactory manner provided seed is properly cleaned. It should be ordered with drill when wanted; is not furnished otherwise.

General Construction of Empire Drills.



In above cut we show all of the gearing necessary, and the manner of regulating it, for the quantity of grain to be sown. The large gear, No. 272, fits on the square shaft that runs through all the feeds. Change gear, No. 266, meshes into No. 272; this sets the drill for sowing two bushels of wheat, rye, oats or barley per acre. With twenty different changes any amount of grain can be sown from one-half to four bushels per acre. The above cut shows how easy it is to alter the amount to be sown, as only one gear, No. 266, has to be changed, and that can be done by anyone in a minute's time. It is simple, strong and durable, as well as positive and accurate.

General Construction of Empire Drills.

Conductors.

An item of prime importance in the selection of a grain drill is the conductor device, for conveying the grain from the box to the ground. Unless this part of the work is well done, the results will not be satisfactory, no matter how well the drill works otherwise.

We make our conductors from galvanized sheet steel (which never rusts) in four sections, riveted upon strips of leather, so that they telescope into each other, and conduct the grain properly under all conditions and circumstances. They never jam when the hoe is thrown back by an obstruction, nor does the lower end project through the hoe when it is raised by sowing lengthwise of a high back furrow. They are flexible and always in position for work, and do it right every time. They are practically indestructible and will last for years. Should the leathers break they are easily repaired at home. "Time is money," and they save time.

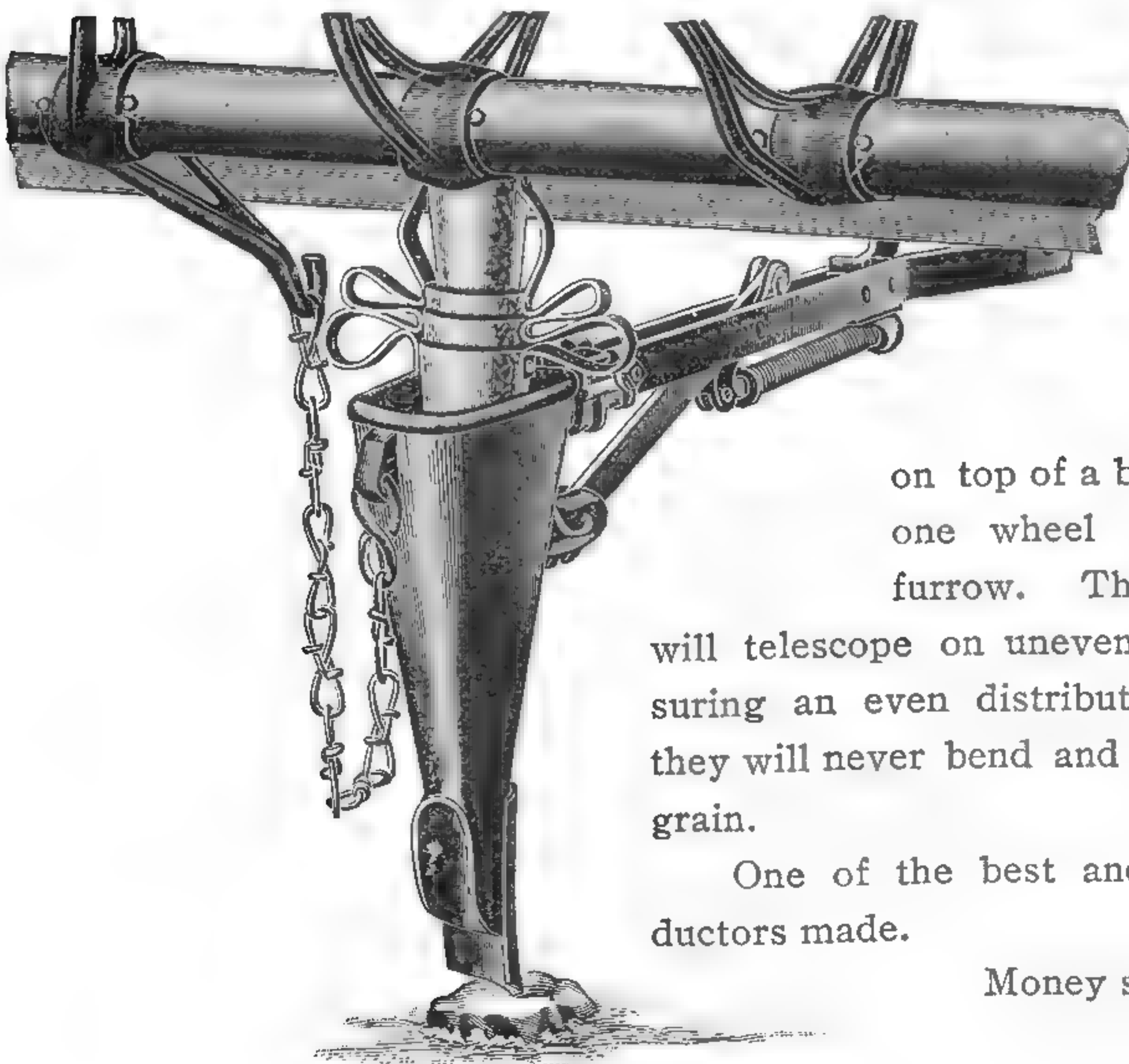
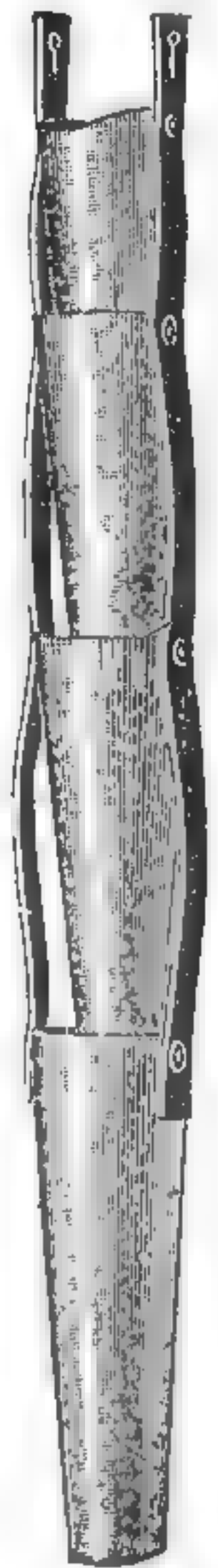


Figure is a section showing the GALVANIZED CONDUCTOR and the position it is placed in when the hoe is raised as in sowing

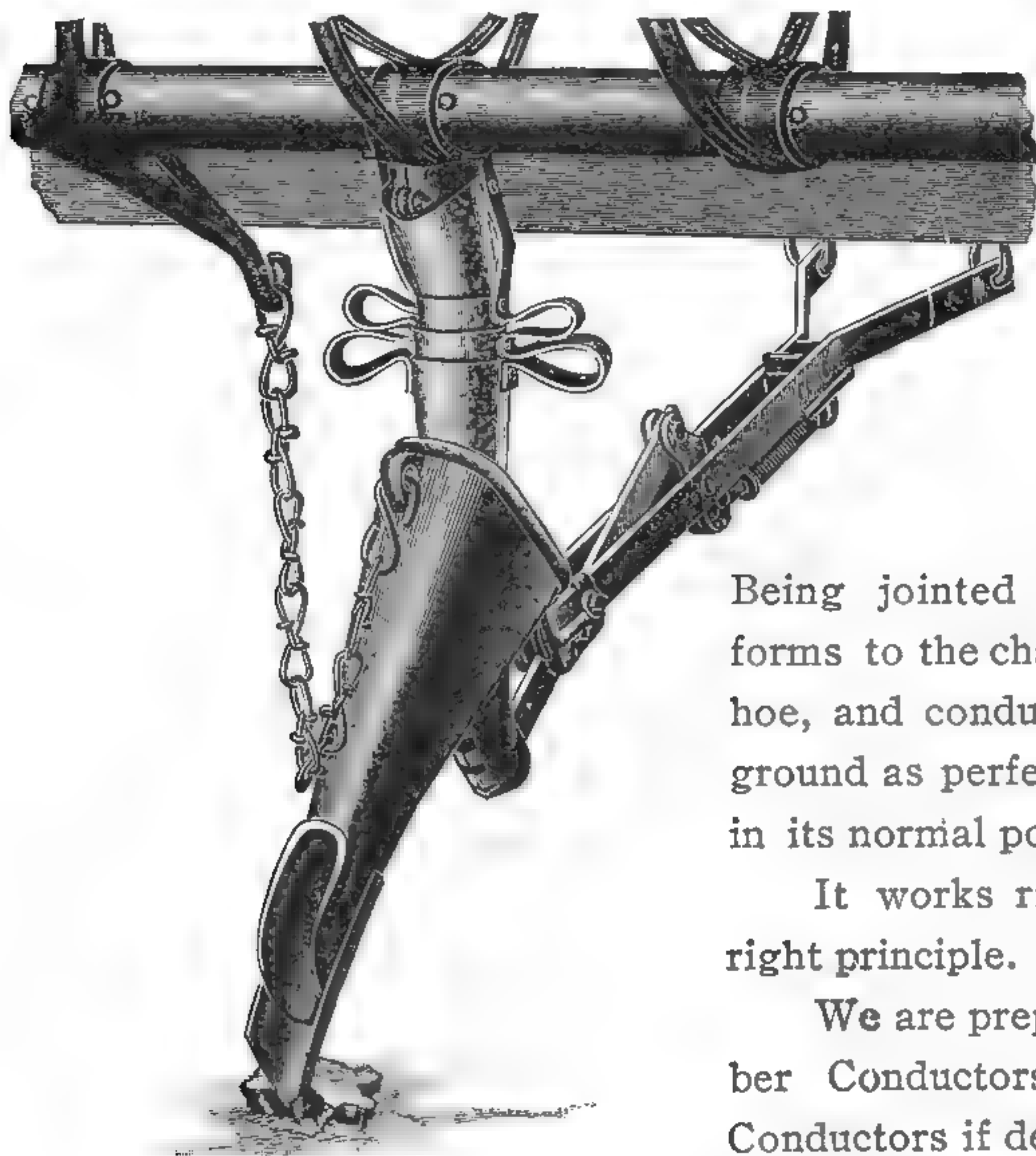
on top of a back furrow, or when one wheel is run in the dead furrow. The metal conductors

will telescope on uneven ground, thereby insuring an even distribution of the seed, and they will never bend and stop the flow of the grain.

One of the best and most durable conductors made.

Money saved in repair bills.

General Construction of Empire Drills.



Cut shows how our telescopic conductor adapts itself during the action of the automatic spring attachment in its operation when an obstruction is met.

Being jointed and flexible, it conforms to the changed position of the hoe, and conducts the grain to the ground as perfectly as when working in its normal position.

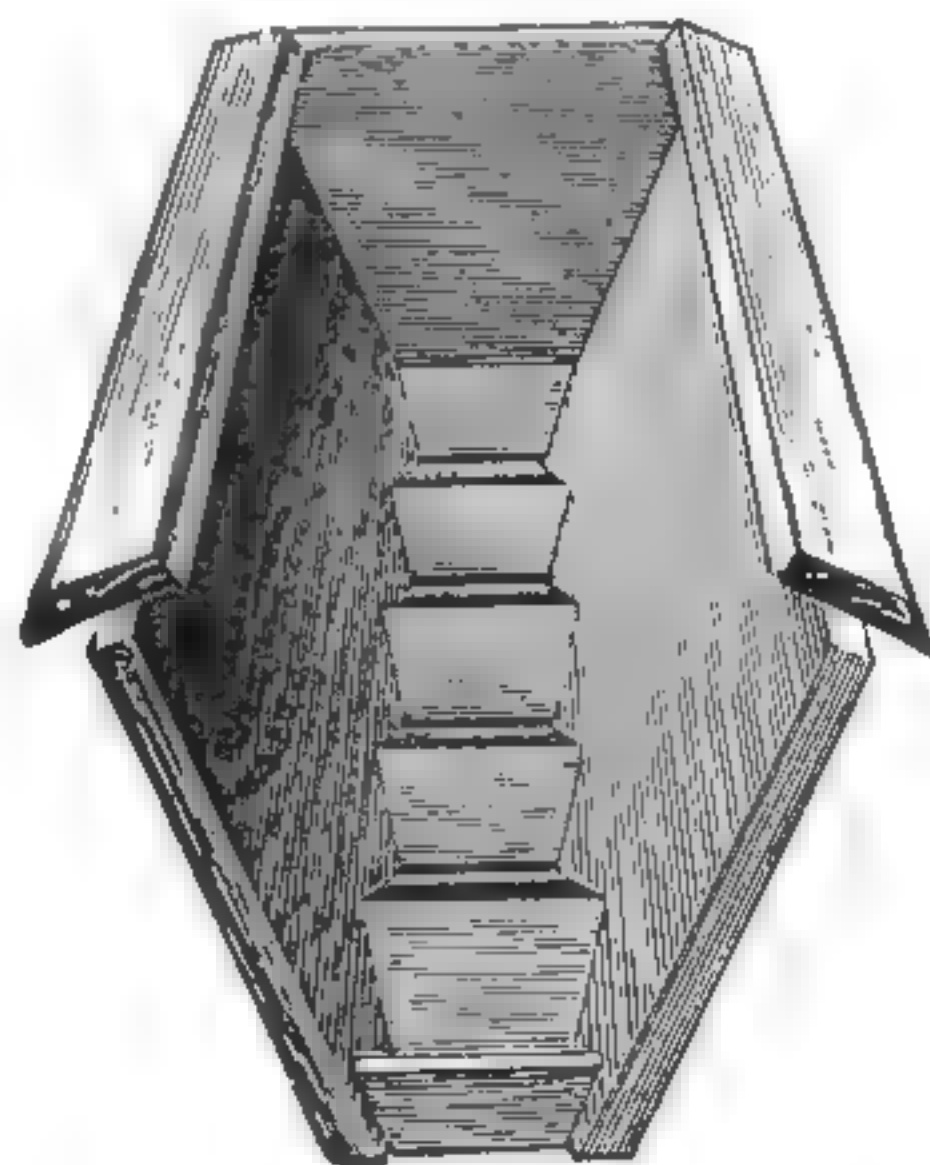
It works right because it is the right principle.

We are prepared to furnish Rubber Conductors, or Steel Ribbon Conductors if desired.

For Steel Ribbon Conductors it is necessary to furnish special Tube Tops.

Hopper Bottom.

This cut shows one of the conveniences on the Empire. The bottom of the grain box is made of triangular blocks placed between each of the feed runs. It helps in sowing, but its benefit is more apparent when seeding is finished and the drill has to be cleaned out. Raise the wheel off the ground and turn it until every kernel is forced out.



Cut-off valves for each run are placed inside of the box, ready for use when wanted, and out of the way when not needed.

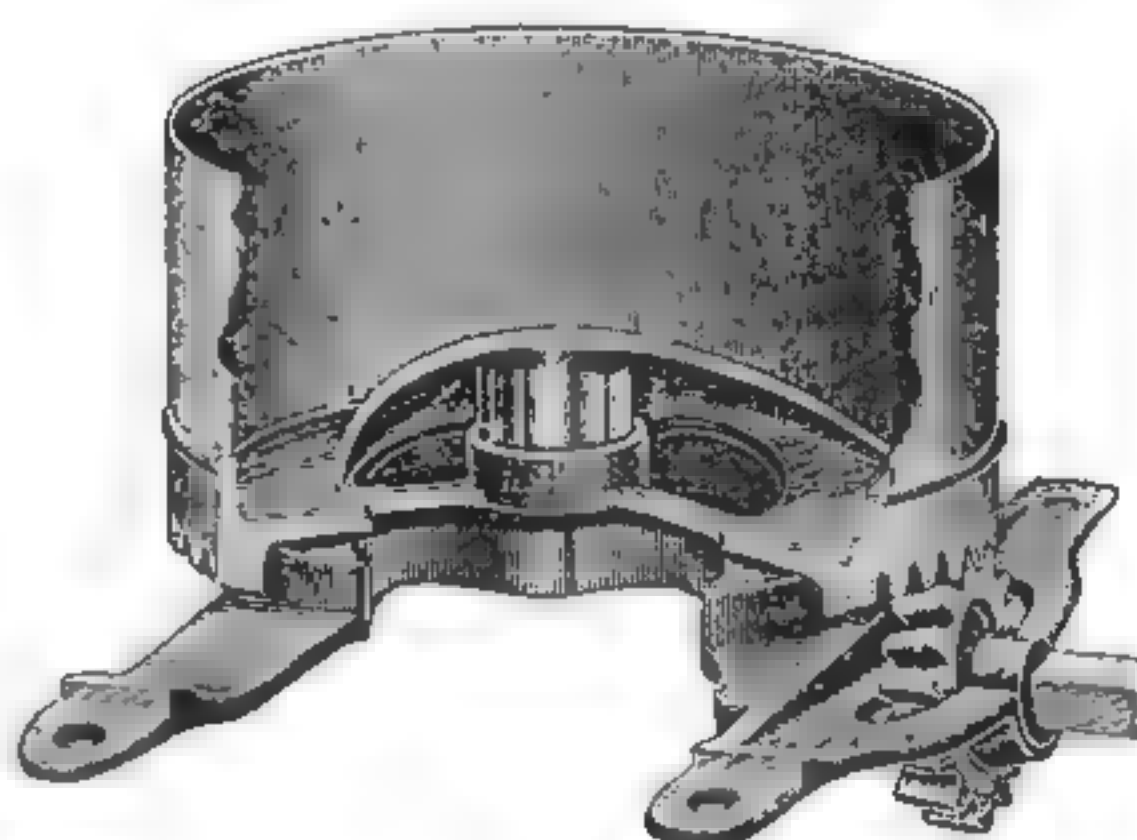
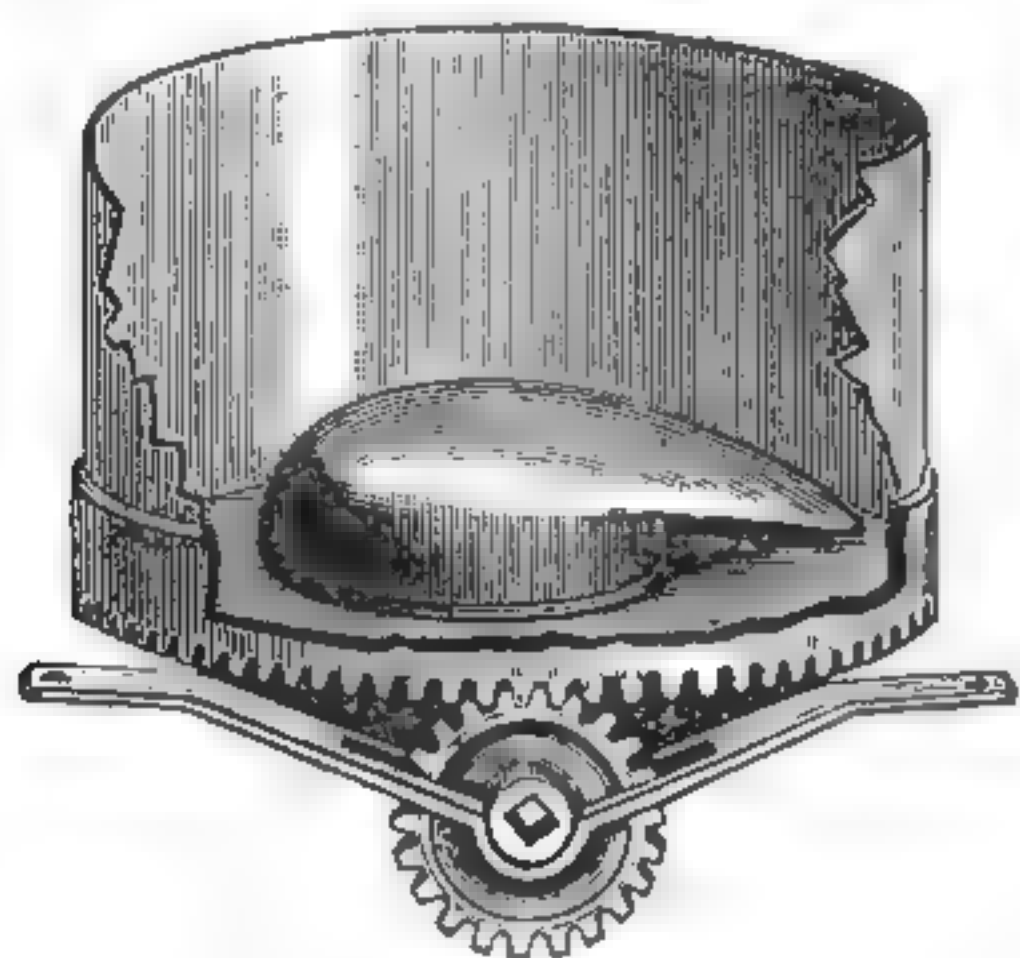
The hoe shifter is operated by a lever near the center of the drill, easily reached from either end. The hoes may be set zigzag more or less.

General Construction of Empire Drills.

Empire "Marks"

Force Fertilizer Feed,

For distributing fertilizers, has been made famous on this drill and is known by everybody to be a most satisfactory feed for doing that work. It does away with all the annoyances usually pertaining to this work and enables the farmer to know what he is doing without taking any chances of its being wrong or different from what he expects or desires.



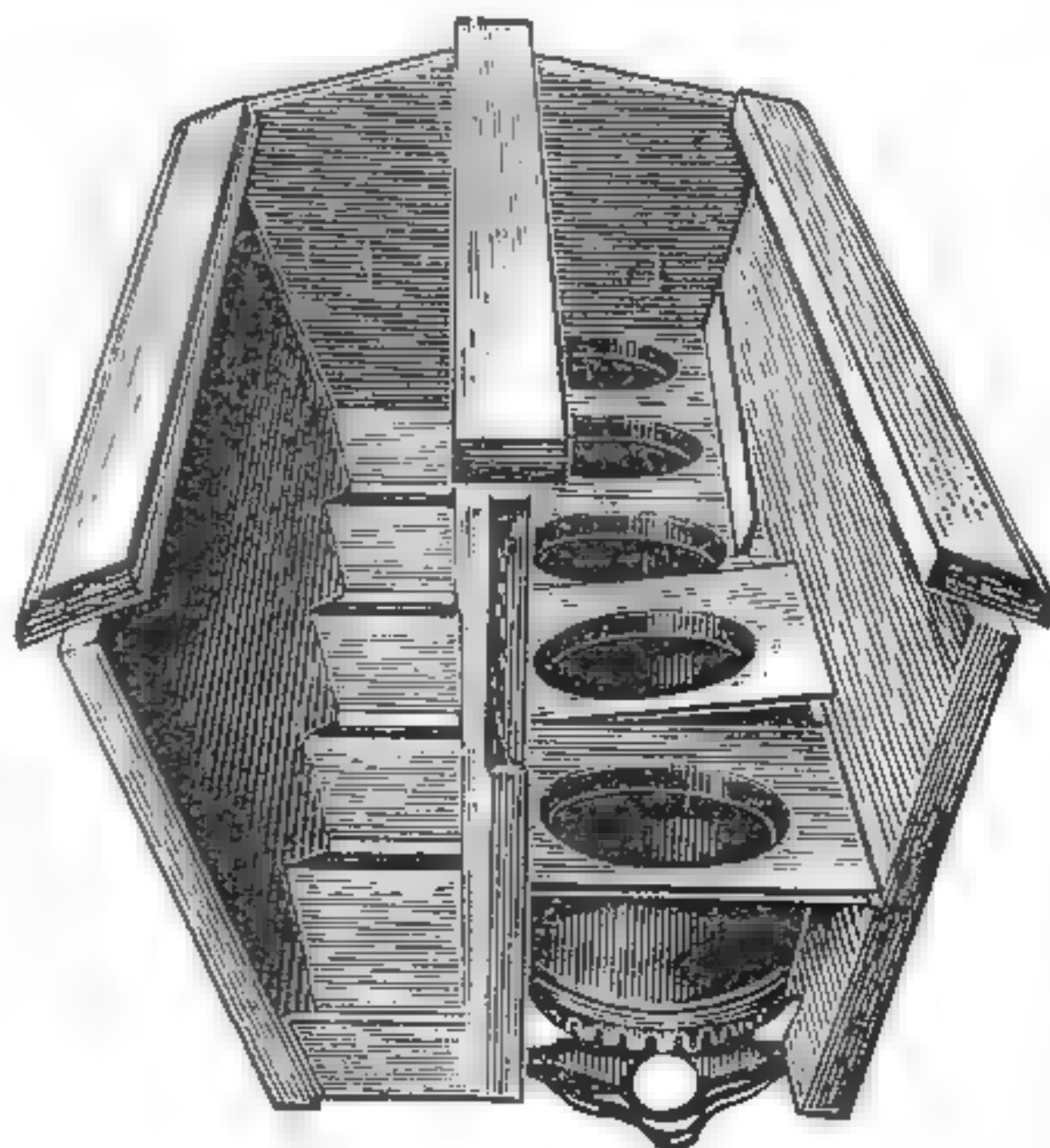
These cuts show the construction of this remarkable feed. As will be seen, it has but four pieces.

1st.—The spider bottom, screwed to the box and supporting the whole mechanism.

2d.—The revolving bottom, with cogs on its under side.

3d.—The oval-topped feeding cap, with eccentric scroll lip extending to the inner circumference of the galvanized cup, fitting closely down upon the upper surface of the revolving bottom, having an opening under the scroll lip large enough to cover the space left outside of its circumference, which space is filled with fertilizer when at work.

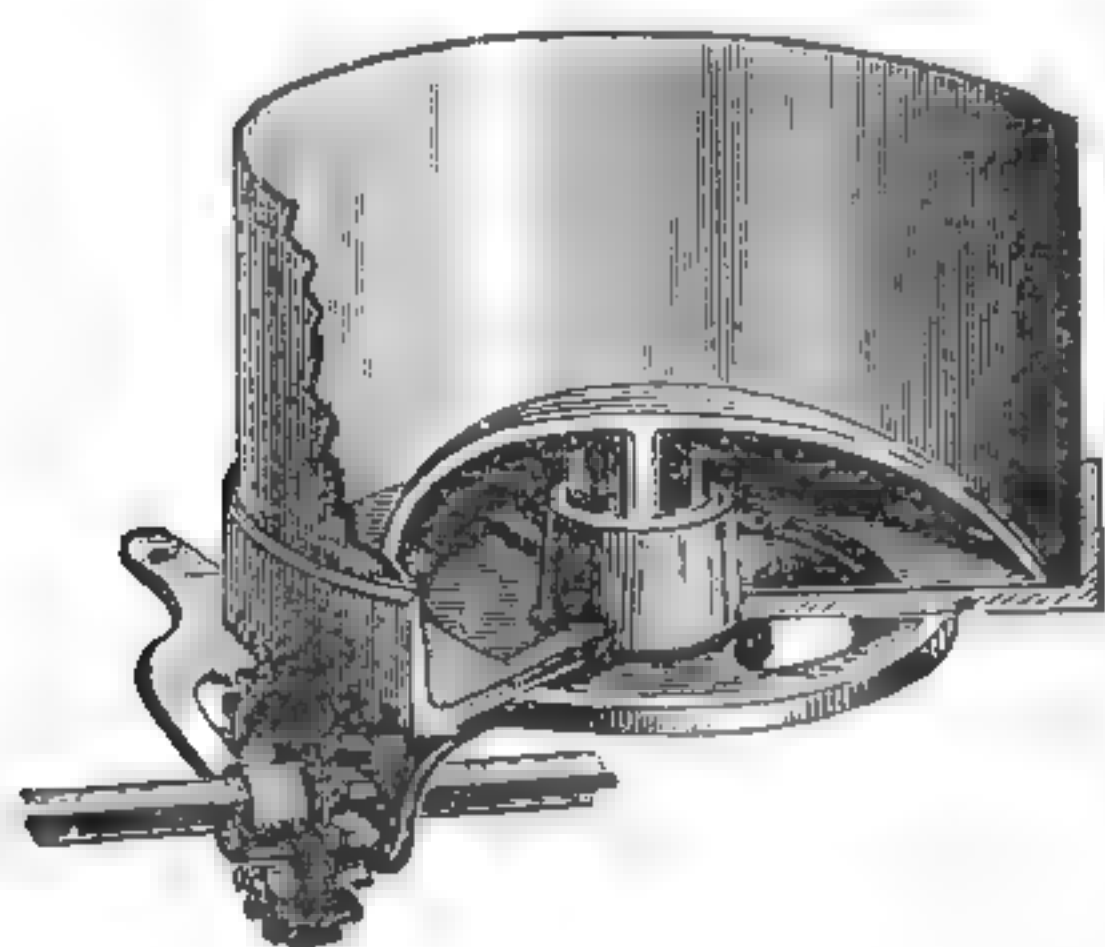
4th.—The galvanized iron band, riveted to the revolving bottom, forming a cup, over the top of which is placed an iron plate forming the bottom of the large box, with a hole through it of such size as to fill the circumference of the cup.



General Construction of Empire Drills.

These parts are strong, bound together without a nut, key, bolt or spring, yet separated without a hammer or wrench.

The feed cap can be set in four different positions, adapting it to handle any fertilizer on the market.



A ring or thimble on the upper surface of the revolving bottom encircles the post of feed cap, which prevents all leakage and waste.

The size of the discharge opening is never changed, whether sowing large or small quantities.

At each revolution of the revolving bottom .095 of a quart is discharged, two revolutions will double it, and 100 revolutions will discharge 100 times as much, so that it is easy to determine the quantities sown. The same combination of gear will always give the same motion, and the same motion will always sow a like amount.

It Is Not Necessary To Do Any Guessing.

The capacity of the drill, as sold, is from 46 quarts to 185 quarts (1 quart is about 2 pounds), with 18 intermediate quantities. It can be made to sow more or less, but anything different must be ordered specially and at extra cost.

The motion being steady and uniform, an even stream is discharged, and

FIFTEEN PER CENT. OF PHOSPHATE IS SAVED.

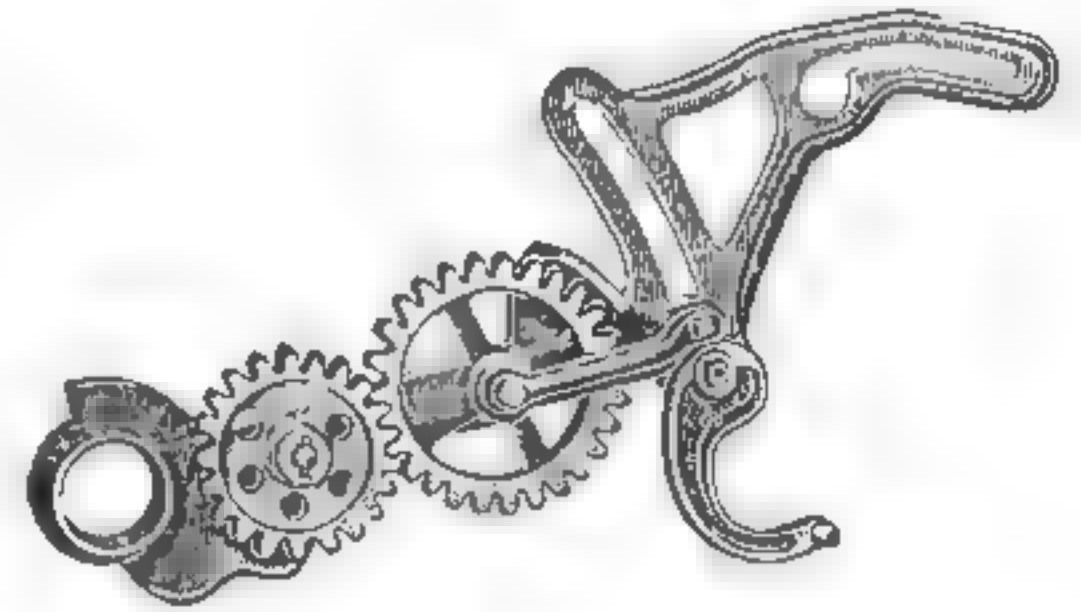
By the regular distribution of the amount used, so that the most desirable results are obtained.

There is no clogging or sticking, no matter what quantity is being sown, but such a movement of the material is forced that every particle is placed with the seed where it is of the most benefit.

General Construction of Empire Drills.

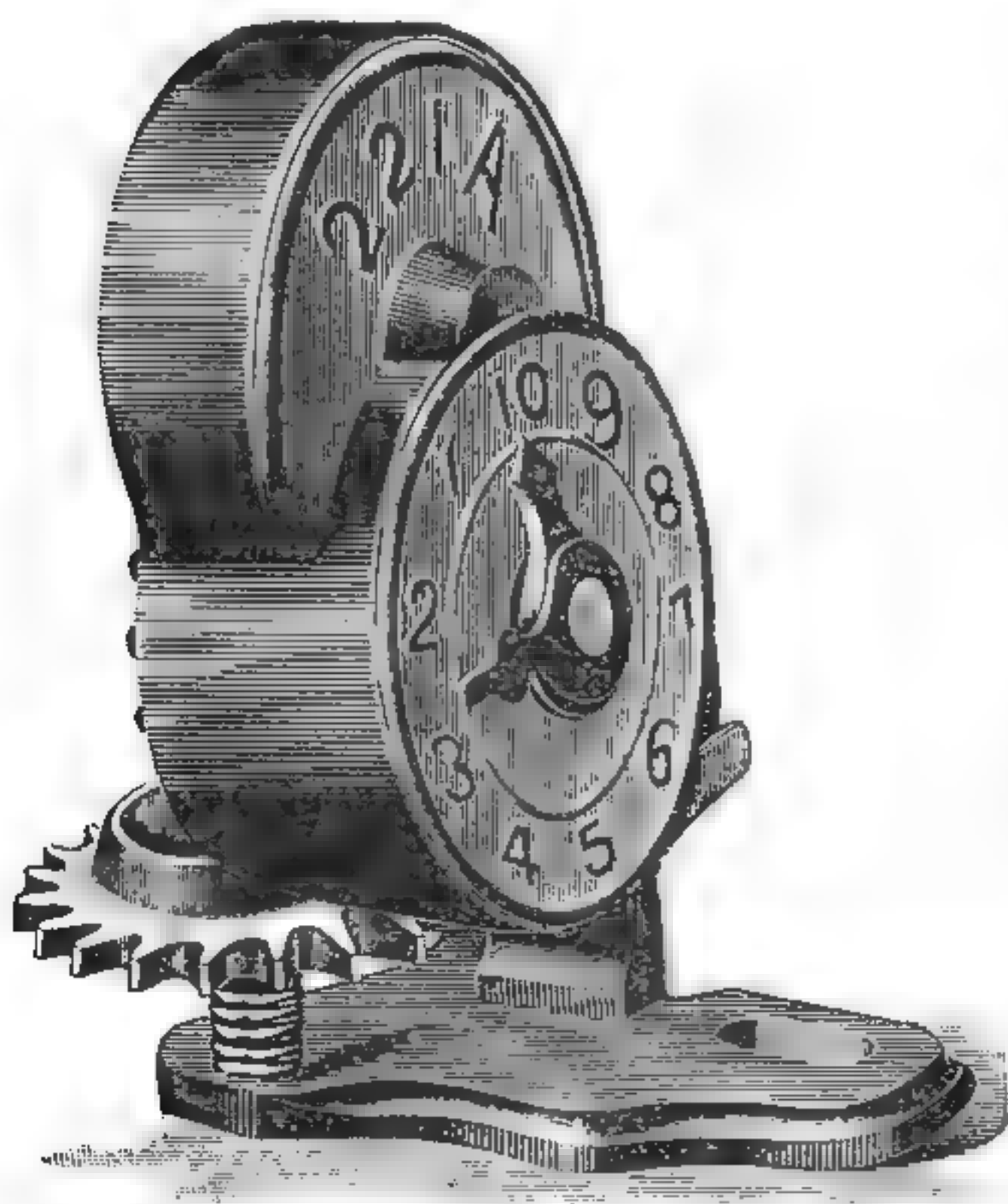
Position does not affect its work, as the material cannot escape control by the cap. There can be no sliding of fertilizer to the end of box, as the cup holds enough to go across any field.

A small eccentric lever at the left-hand side of the drill (see cut) enables the operator to throw the fertilizer attachment into or out of gear without stopping. A large amount of fertilizing material can be saved by this ingenious device, as there are many spots in fields that do not require enriching; by leaving this eccentric lever down as shown in cut, the drill can be operated without using the fertilizer part.



Raising and lowering the hoes throws the attachment into or out of gear.

If there is fertilizer left in the box when seeding is finished, raise the wheel off the ground, turn it, and it will be discharged.



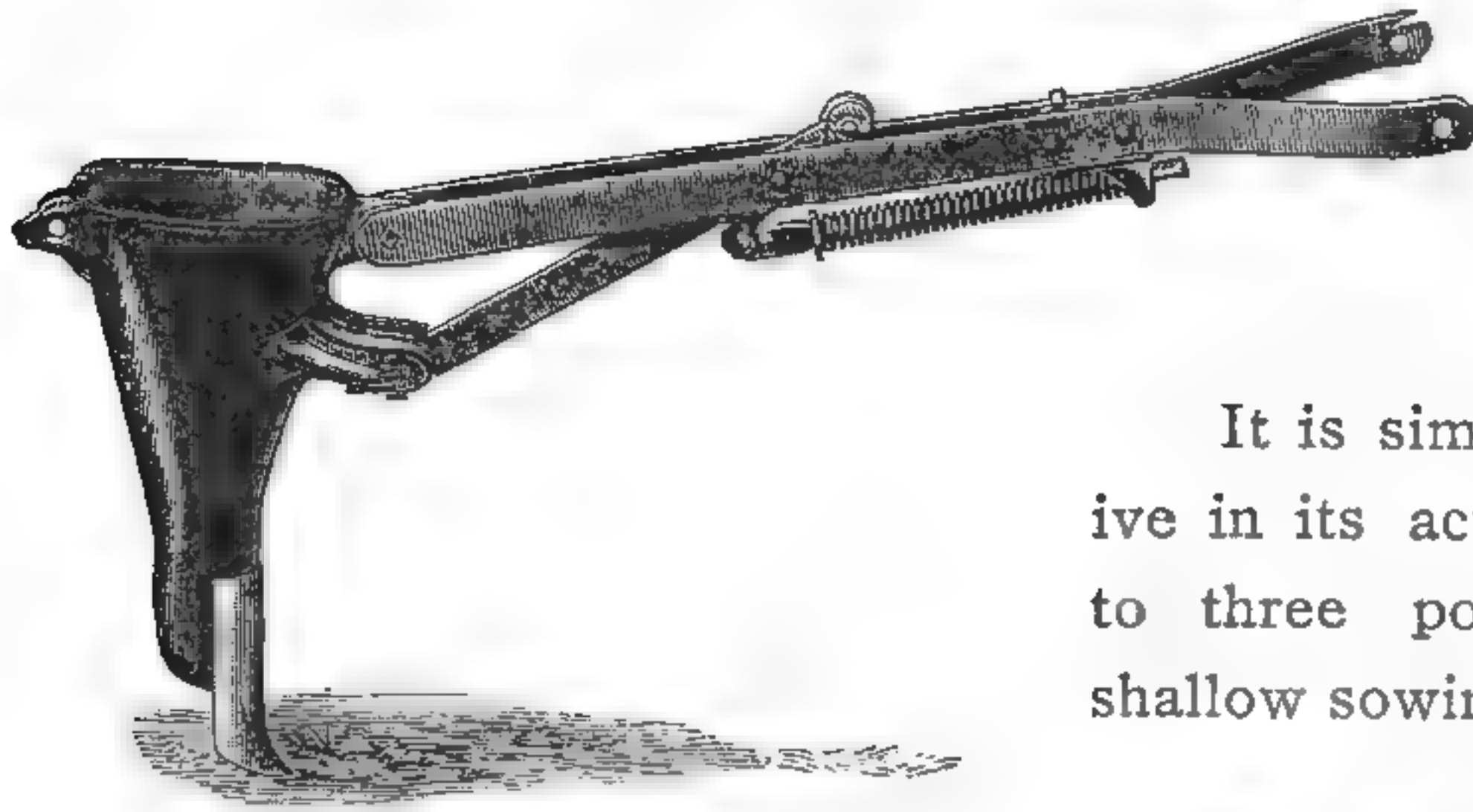
We recommend when this is done that the light strip, inside the box, be taken off, top plates removed, and the whole mechanism taken out, thoroughly cleaned and oiled with kerosene (coal oil).

Land Measure

Simple and compact, marking the acres up to ten and parts of an acre by tenths. It is bolted to the frame at the right hand side, directly in front of box.

General Construction of Empire Drills.

The Empire Spring Hoe.



It is simple, durable and effective in its action. Can be changed to three positions for deep or shallow sowing.

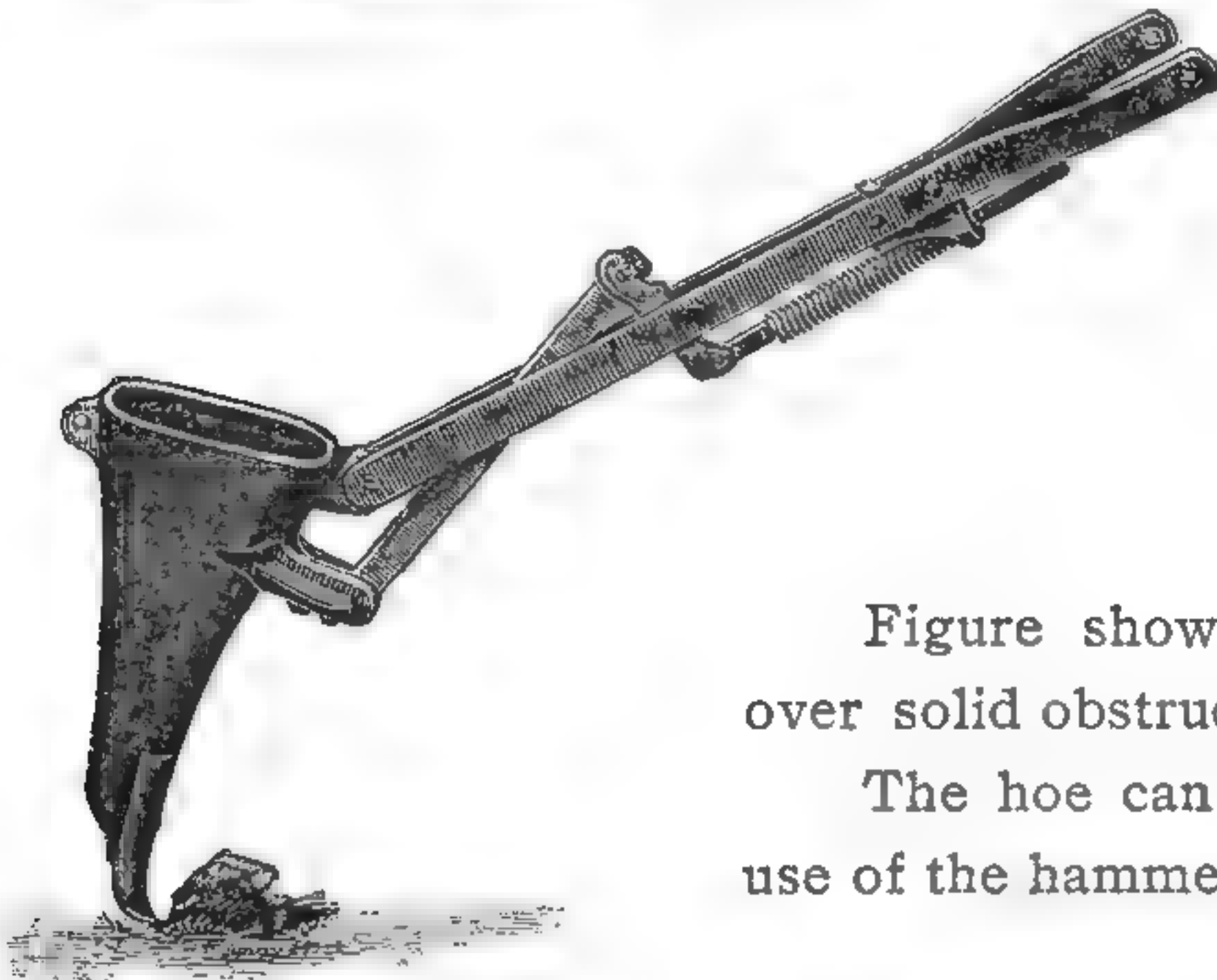


Figure shows position when passing over solid obstruction.

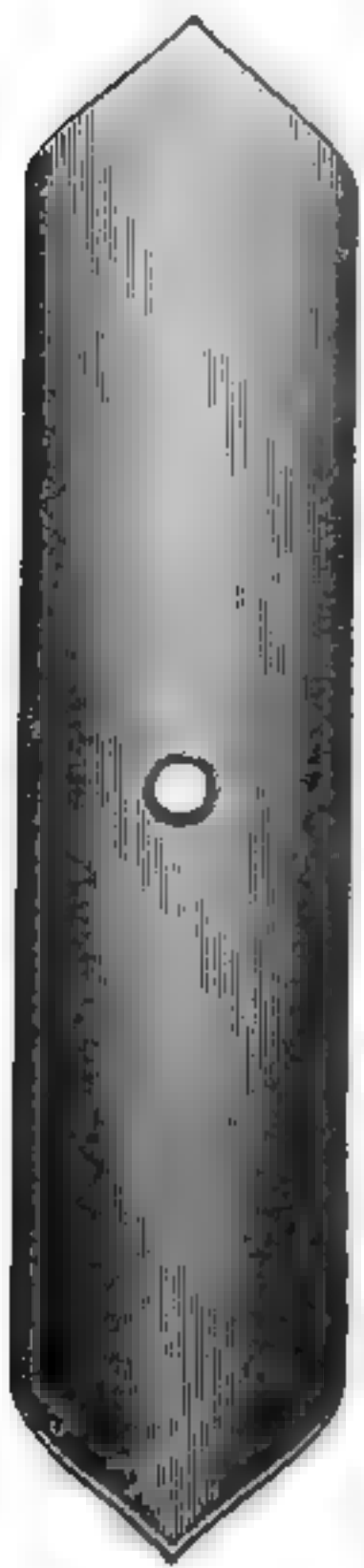
The hoe can be removed without the use of the hammer.



The pitch of the hoe is regulated, without loosening a nut or bolt, by putting lever in any one of three notches in hoe.

One of the best and most satisfactory spring hoes made.

General Construction of Empire Drills.



Easy Running.

The proper depth which seeds should be planted is a debatable question. In some sections of the country the seed is only very lightly covered, and in others covered to a much greater depth. Results show that soil and climatic conditions must be taken into consideration and that the western farmer must plant seed deeper than the eastern farmer.

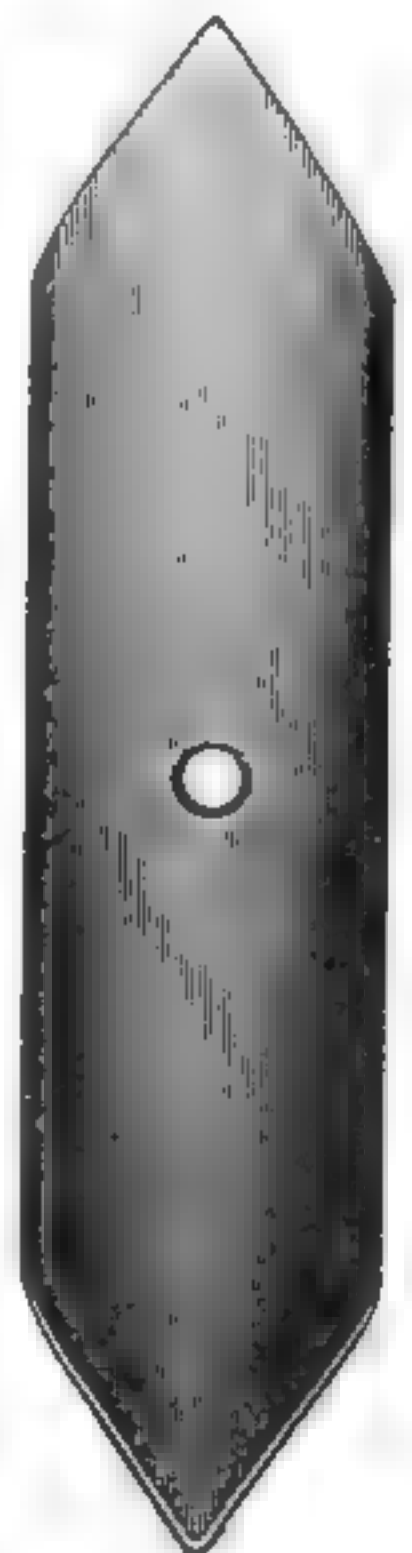
The construction of the Empire adapts it for planting any reasonable depth.

Our regular points (see figure) open a broad furrow with a wide bottom, and the angle which they present to the surface is easily adjusted to enter the ground sharply, or trail, slightly skimming the surface, thereby covering the seed lightly, or to a depth desired by the user.

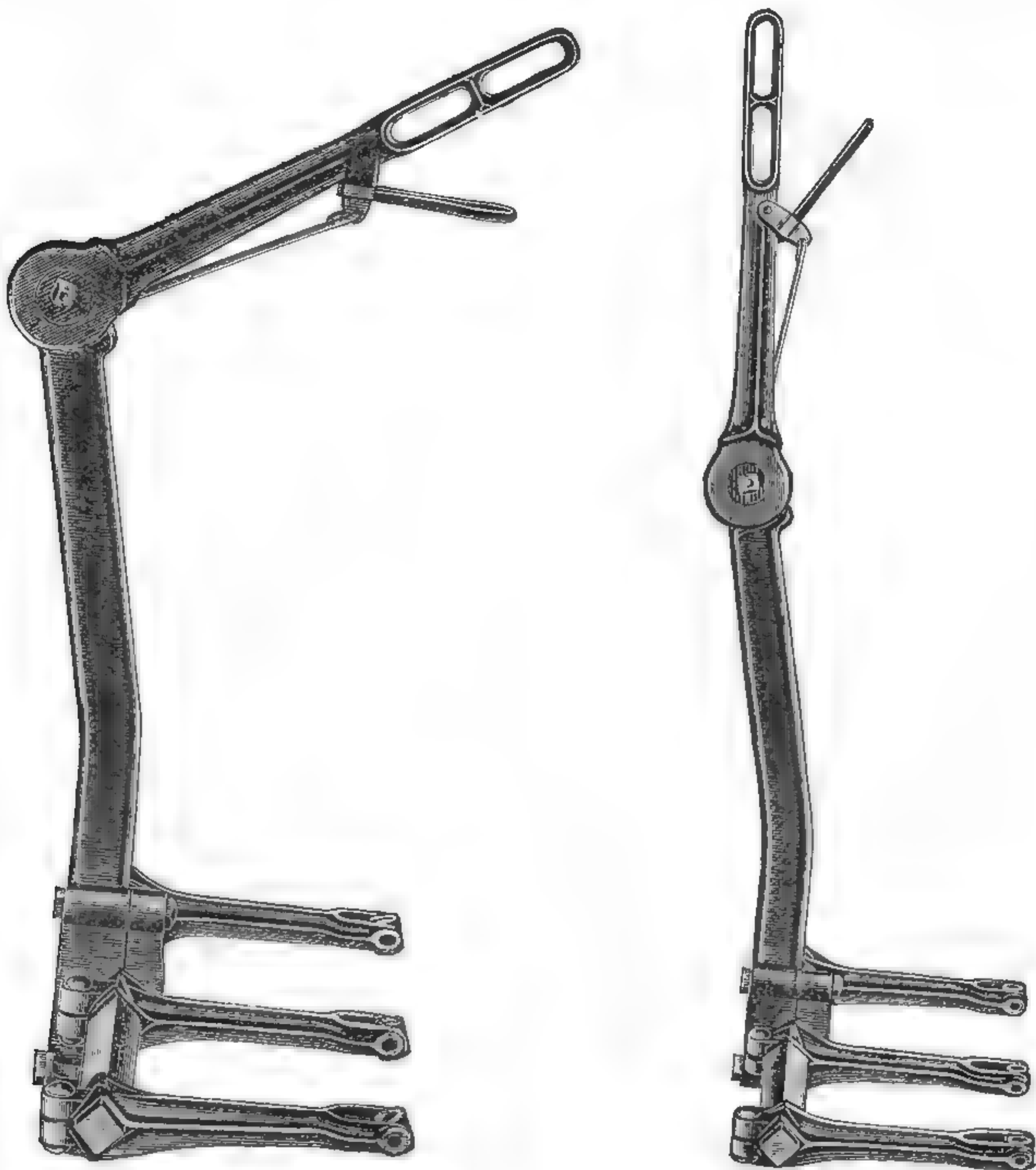
When specially desired, we can furnish sharp points, see figure.

Both shapes are made double pointed, so that when one end is worn out it can be reversed, and you have a new point. They scour in all soils.

This principle, the perfect balance of the machine and the manner of hanging our wheels, have won for the Empire the deserved reputation of being one of the **LIGHTEST DRAFT DRILLS ON THE MARKET.**



General Construction of Empire Drills.

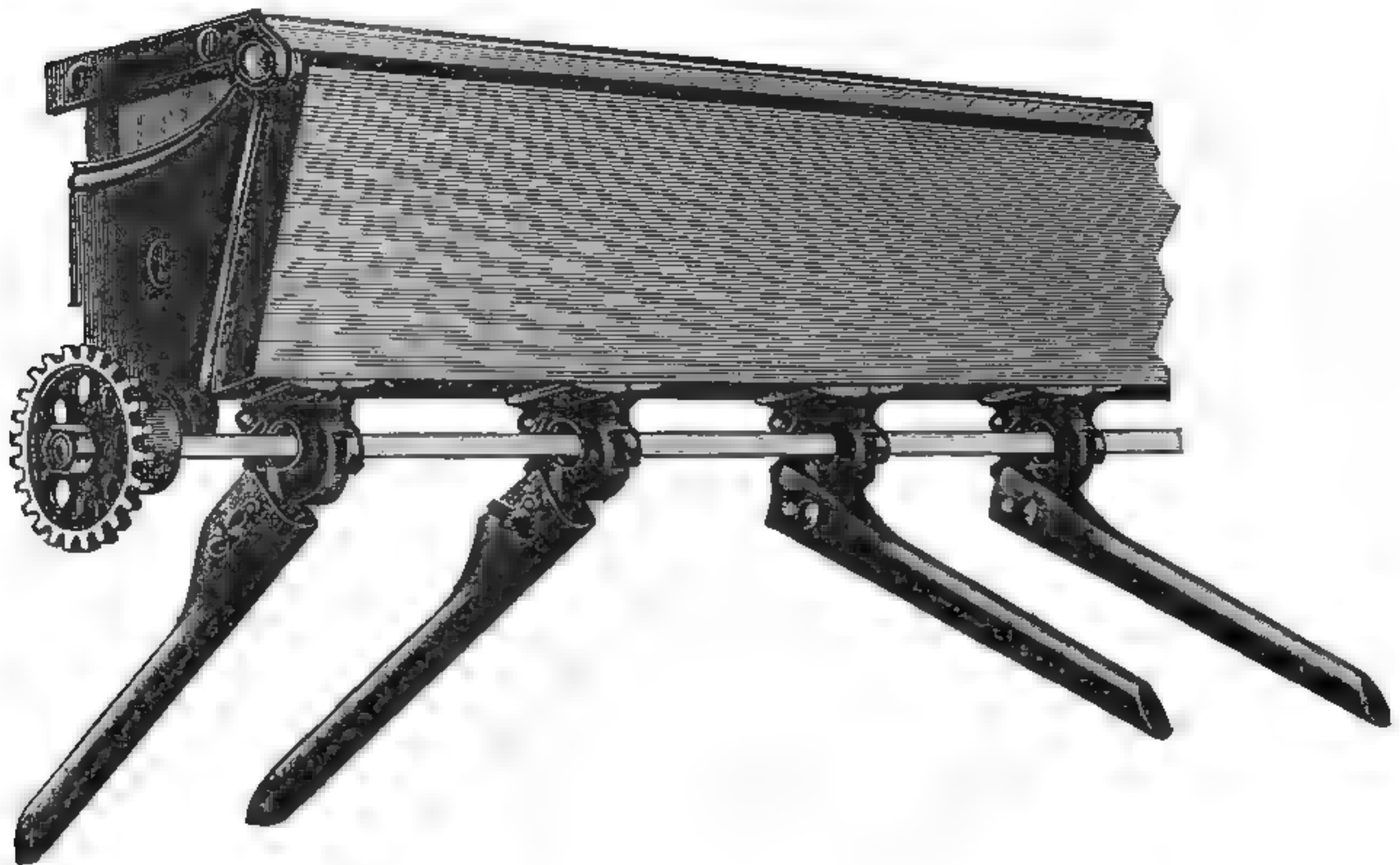


Combination Lever.

These two cuts show two different positions of our combination lever, which is used on all Empire Shoe, Disc and Spring-Pressure Drills. The cut on left shows it at an angle of about 45 degrees, and the one on the right in an upright position. By an ingenious device this lever can be placed at an angle of 90 degrees, thus giving us three different positions in which the lever can be operated, either for riding or walking.

It is made of malleable iron, light and strong, and for convenience in operating and substantial construction there is nothing better made.

General Construction of Empire Drills.



Grass Seeder.

The above cut shows a partial view of our grass seeder and illustrates how the grass seed can be sown either in front or rear of drill. The grass seeder conductors, which fasten to the run under the box, are reversible; for a front seeding they should be attached so as to extend in front, or to the right, as shown in cut; for a rear seeding reverse them, extending back, or to the left, as shown.

The feed to a grass seeder is of as much importance as for grain; this feed is the same in principle as our grain feed. The quantity sown is regulated by change gear, and being a force feed it will sow as well on a damp as a dry day. We can sow from 2 to 32 quarts per acre. Nothing better in a grass seeder.

The proper distribution of grass seed is of as much importance as the distribution of grain, and we use the same force feed principle for both purposes.

A grass seeder that is appreciated by all who want the best.

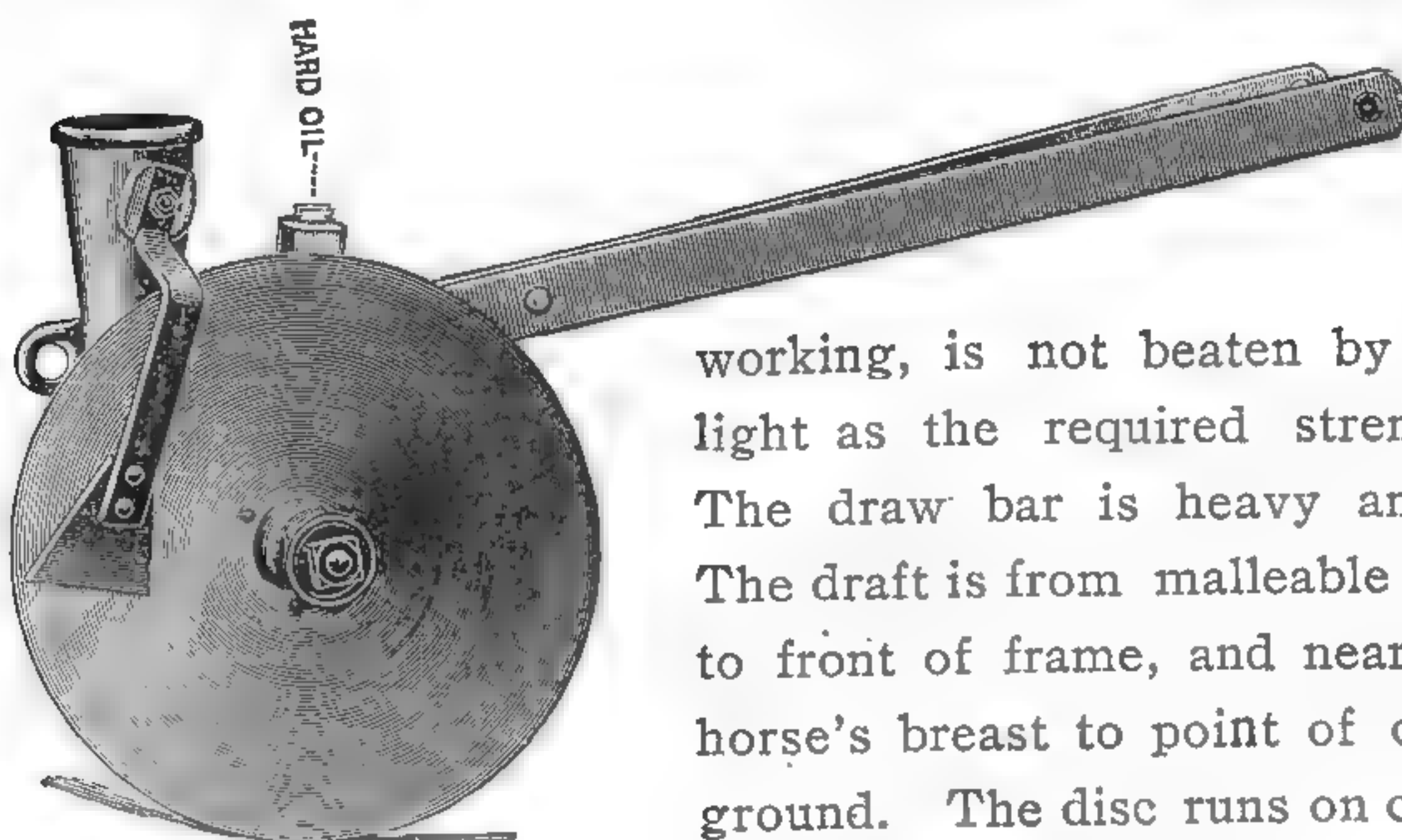
All Empire Drills are furnished either with or without Grass Seeder, as desired.

General Construction of Empire Drills.

Disc and Draw Bar.

These detail cuts show the construction of the Empire Disc and connection, which

for practical utility, beauty of design and satisfactory



working, is not beaten by any. It is as light as the required strength will allow. The draw bar is heavy and well braced. The draft is from malleable hangers bolted to front of frame, and nearly in line from horse's breast to point of contact with the ground. The disc runs on chilled bearings,

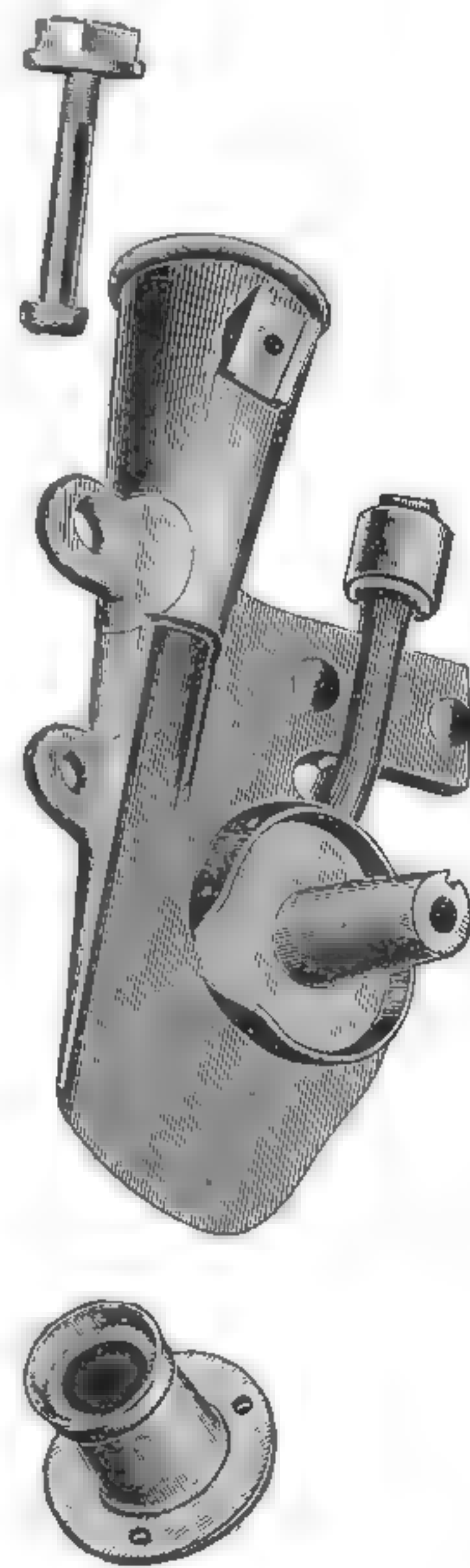
provided with a dust-proof, hard-oil compression cup.

Notice the hard oil cup for lubricating disc bearings. Dust and grit cannot work into the Empire Disc Bearings. These cups hold a large quantity of hard-oil—sufficient for thoroughly lubricating disc bearings in planting many acres. The hard oil is placed where it will do the most good, and it stays where it is put. Common oil runs right in, and is out just as quick. The Empire has THE PERFECT method of lubricating disc bearings.

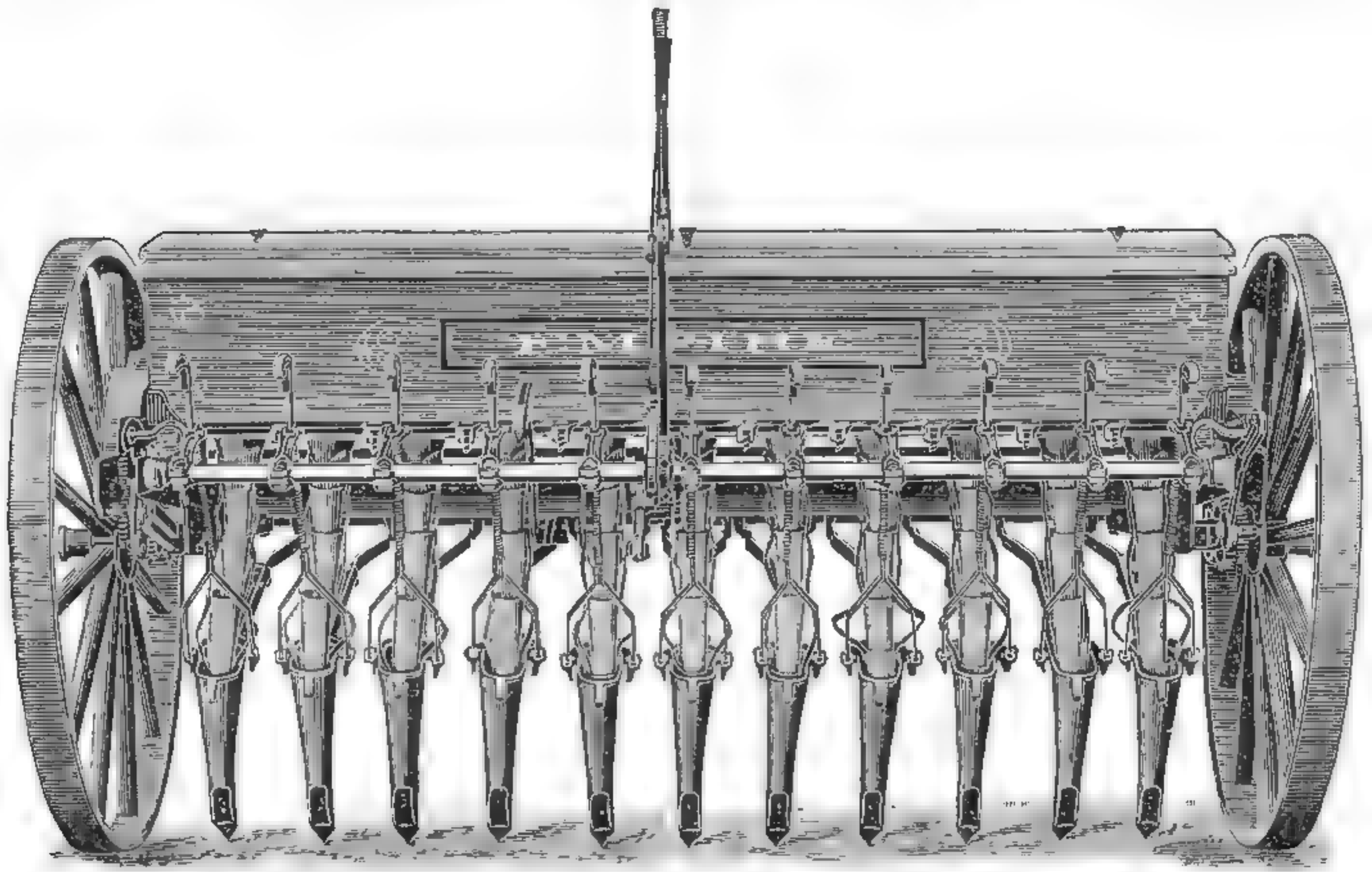
The angle of the disc to the line of travel is just right, opening a channel of the proper size and depth to deposit the seed all underground. The scrapers are spring steel.

Cut shows the simplicity and individual parts of our disc boot journal and the boot thimble that attaches to the disc, which can be easily replaced if it wears out.

One of the most substantial and satisfactory constructions on the market.



Empire Spring Pressure Hoe Drills.

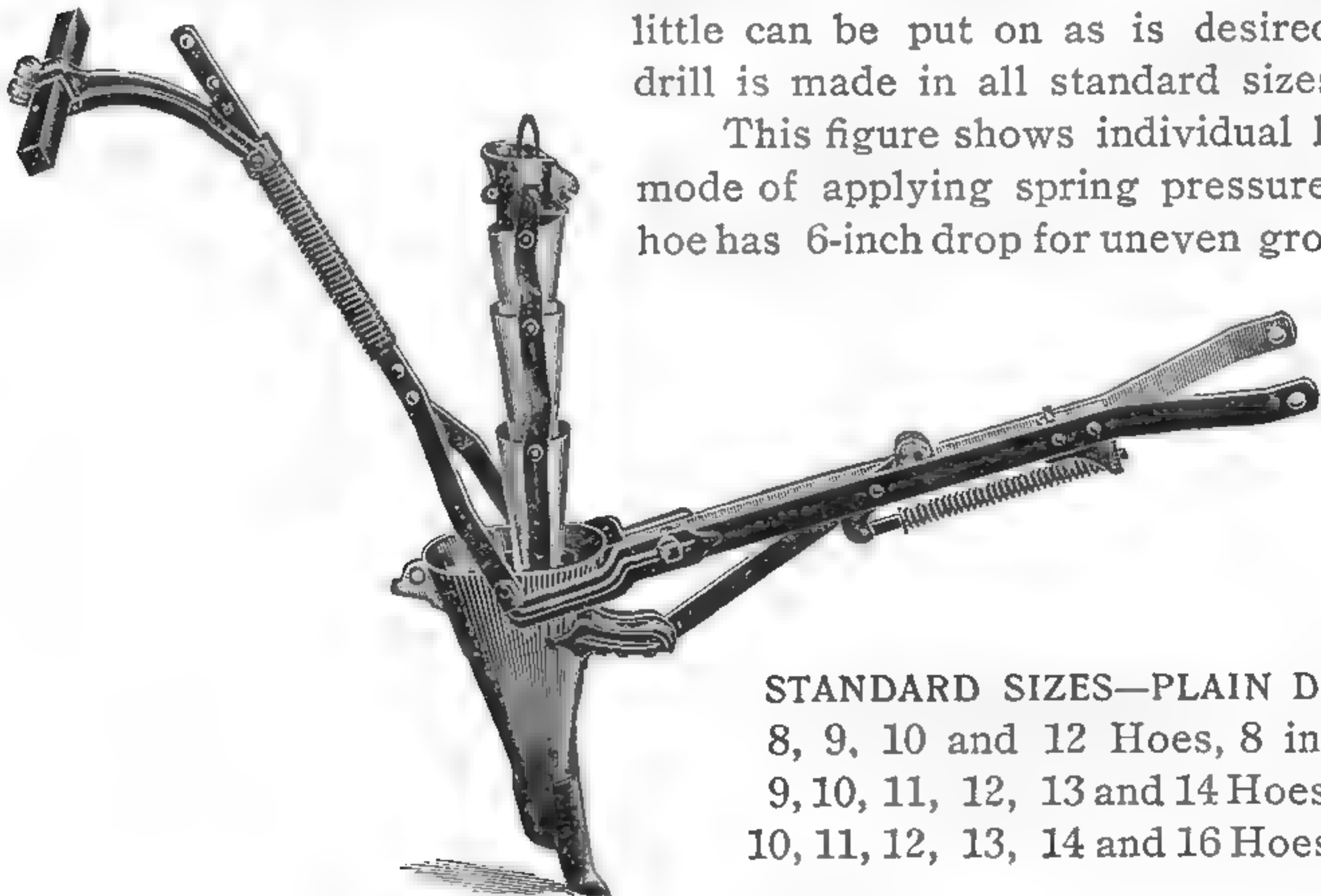


Rear View of an 11-Hoe, Spring Pressure, Steel Frame Drill.

This style is used in some sections. The lever for raising and lowering the hoes, as well as putting on the pressure, is located conveniently in center of and at rear of drill.

Note that the pressure is applied at rear of hoe, so that as much or little can be put on as is desired. The drill is made in all standard sizes.

This figure shows individual hoe and mode of applying spring pressure. This hoe has 6-inch drop for uneven ground.



STANDARD SIZES—PLAIN DRILLS.

8, 9, 10 and 12 Hoes, 8 inch.

9, 10, 11, 12, 13 and 14 Hoes, 7 inch.

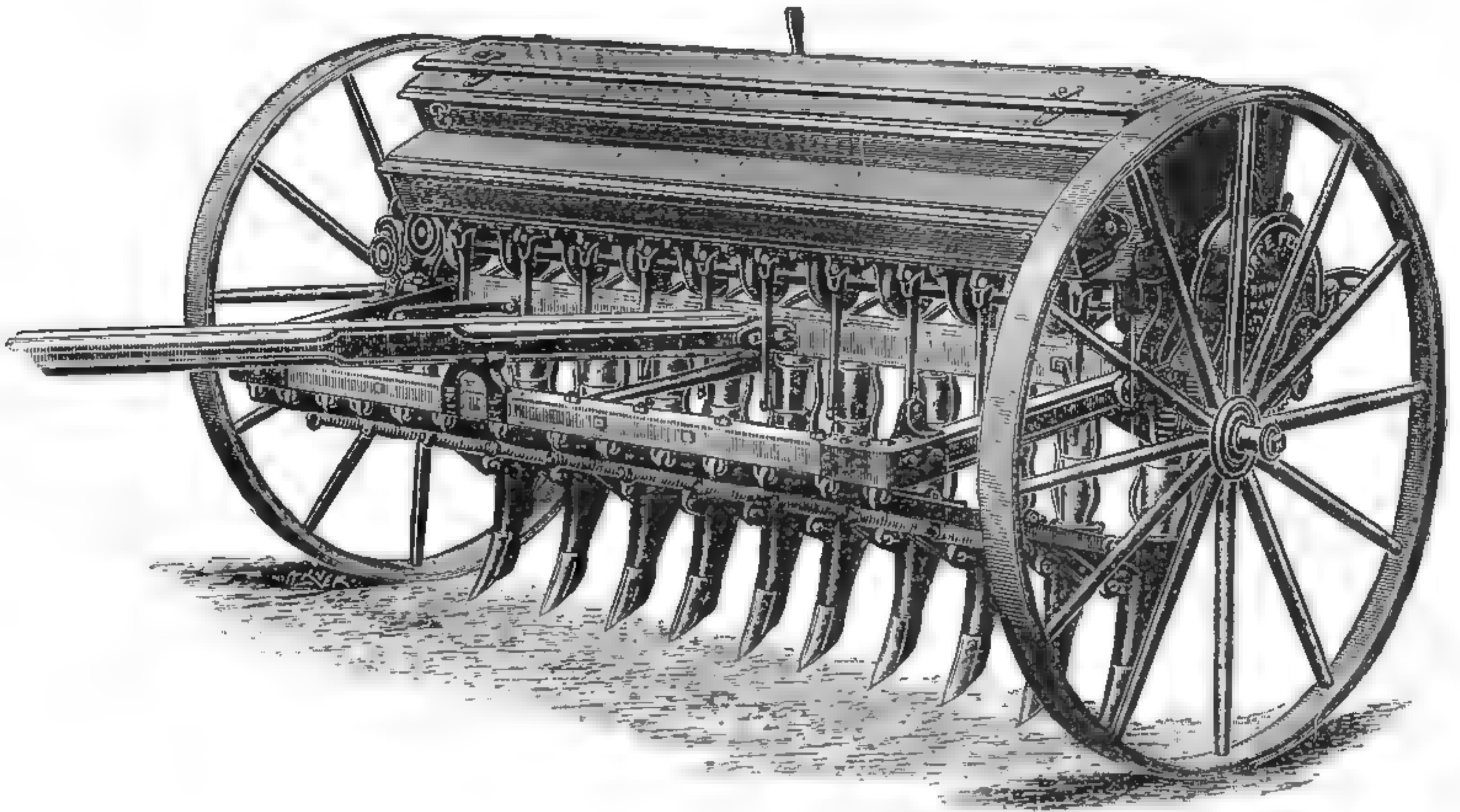
10, 11, 12, 13, 14 and 16 Hoes, 6 inch.

FERTILIZER DRILLS.

6, 8, 9, 10, 11 and 12 Hoes, 8 inch.

9, 10, 11 and 12 Hoes, 7 inch.

Empire Fertilizer Hoe Drill.



Looked at from any point of view, the Empire is graceful in appearance, substantial in make-up and beautiful in finish.

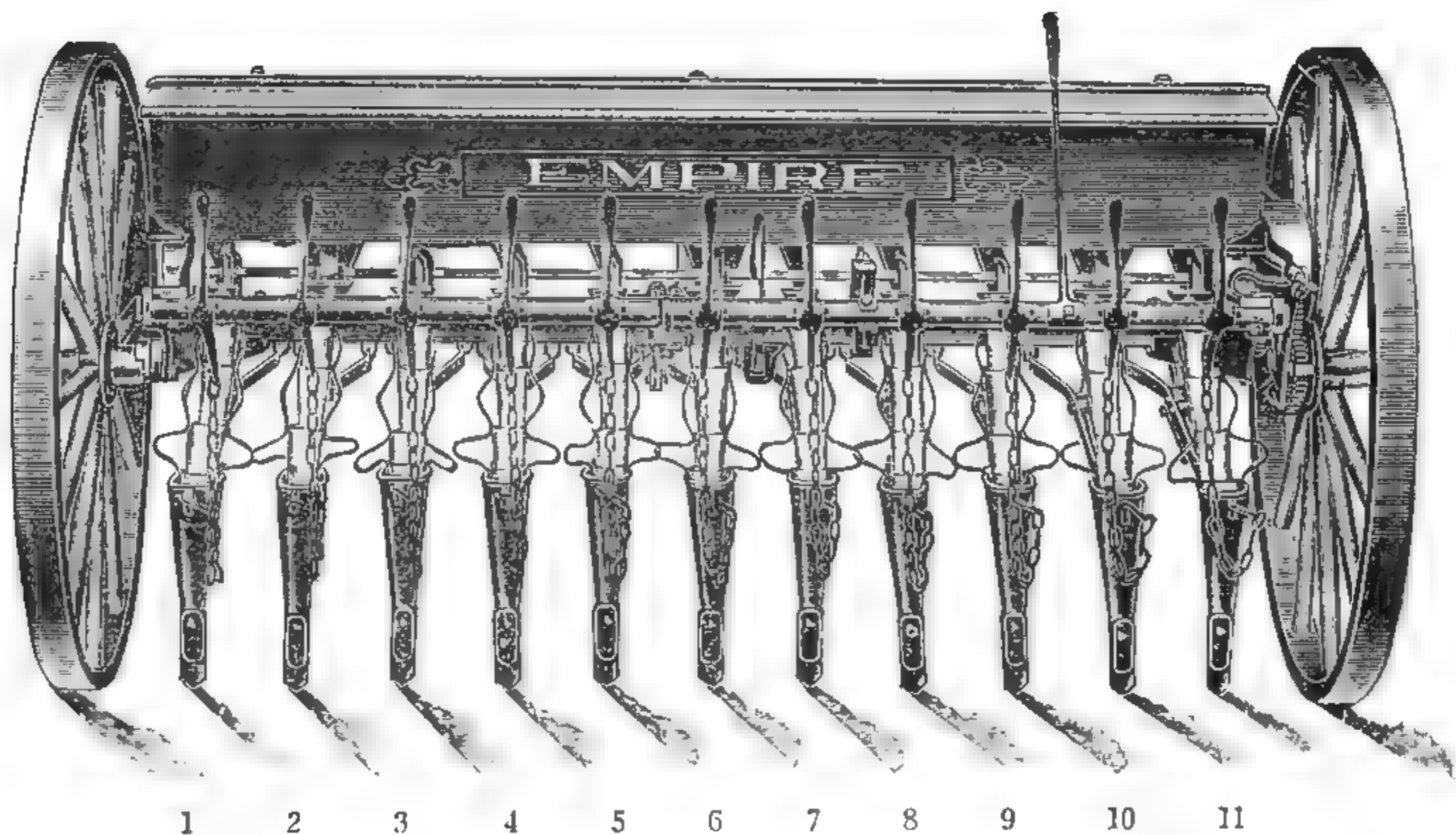
This picture is a front view of our grain and fertilizer drill, put up with steel frame, showing the manner of attaching the grass seeder, with its spouts for conveying the grass seed to the ground in position to distribute it in front of the hoes. These spouts are easily and quickly changed to the rear if desired. See description on page 17 of this catalogue.

The malleable iron clips on the corners of the frame, and the wrought iron braces extending from end piece to axle, are also shown clearly. See them on page 3.

The end shown is the left-hand end as you stand behind the drill, and shows the mechanism for regulating the flow of fertilizer, with gearing covered to protect it from accidental stones or sticks.

Much of this drill is malleable, wrought iron and steel, neat in appearance, with a harmony of design for strength and durability.

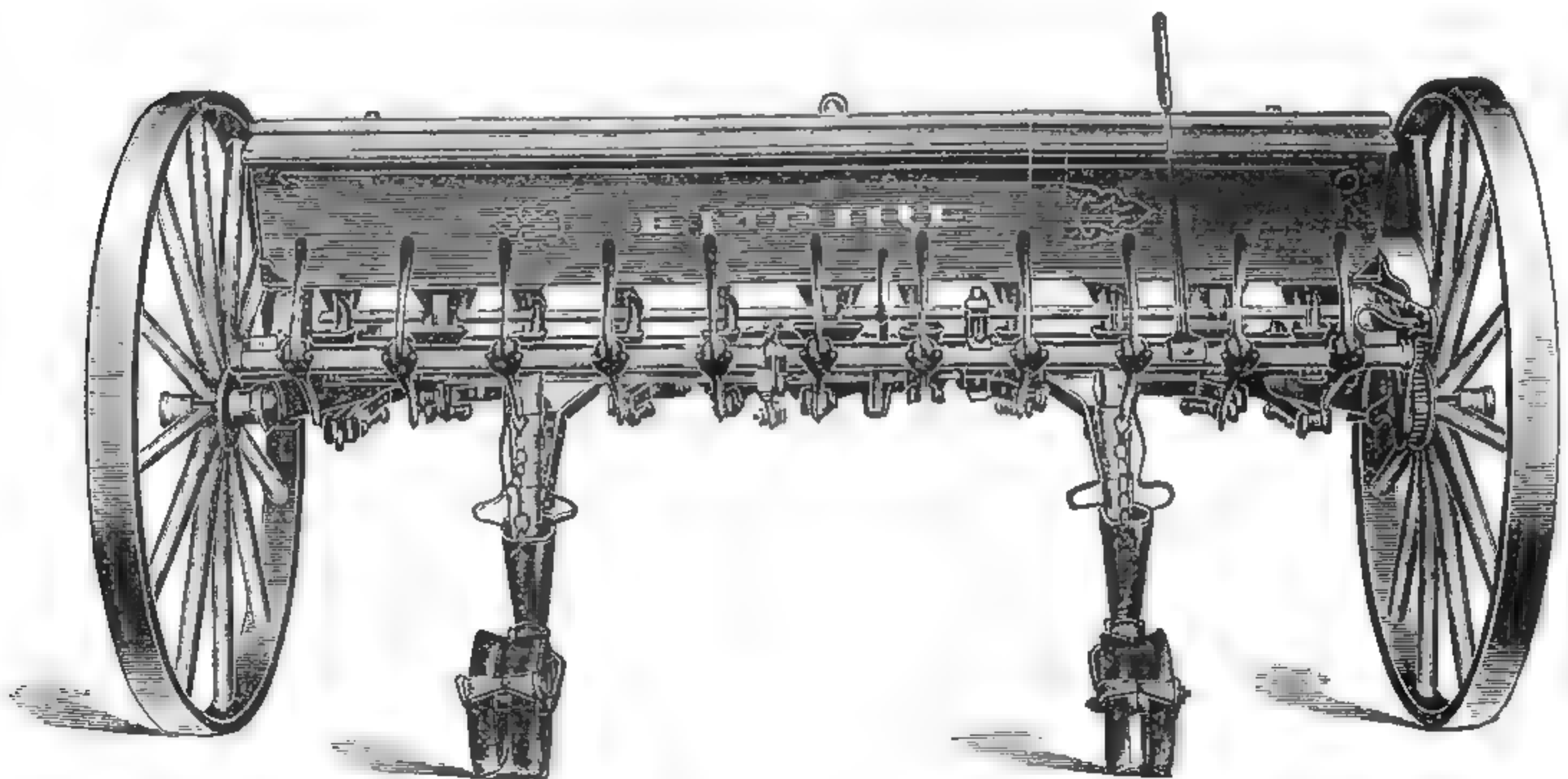
Empire Drill for Corn Planting.



If you want to cultivate fodder corn, make the rows 28 inches apart, by shutting off 1, 3, 4, 5, 7, 8, 9, 11, and you have three rows.

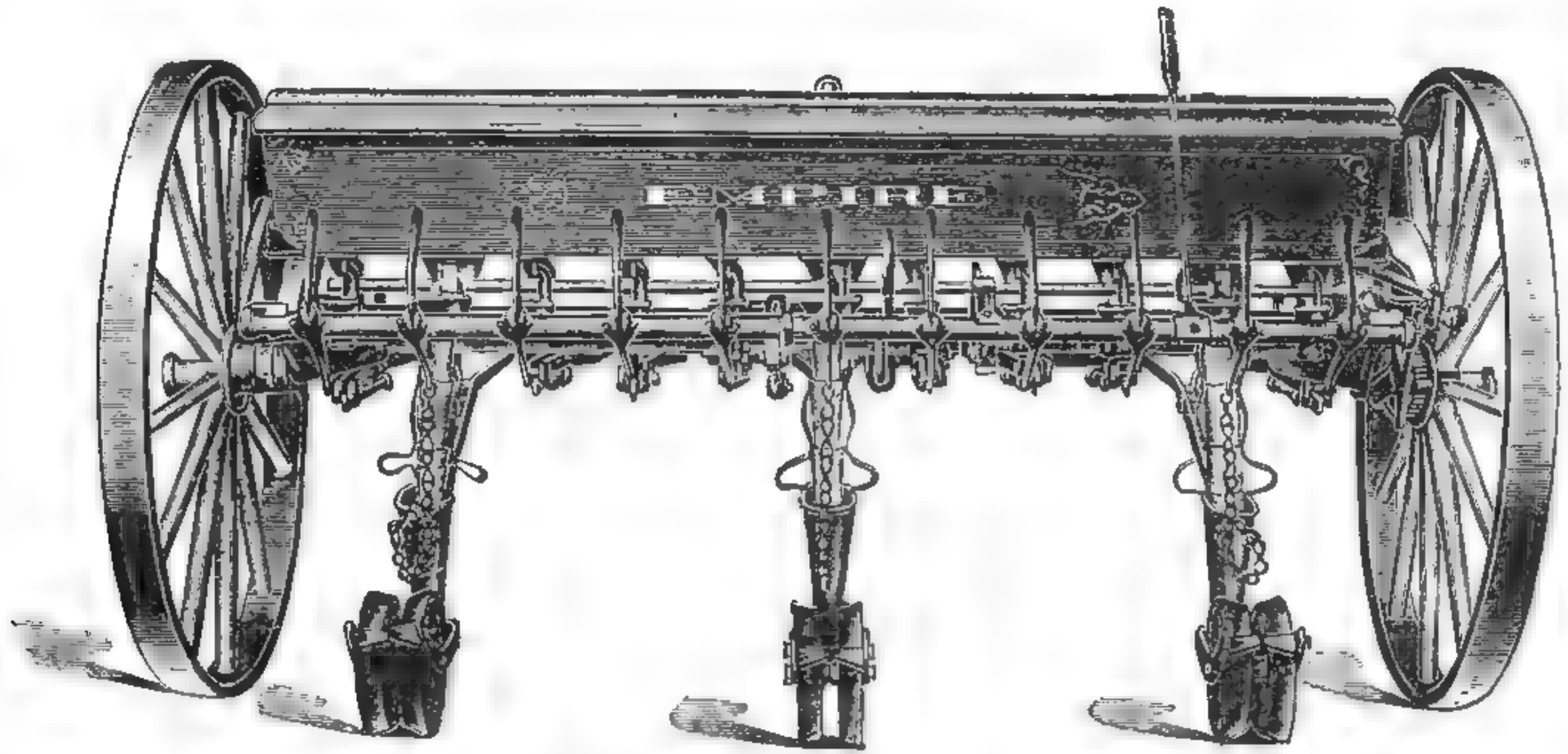
In planting corn for crop, shut off all the feed runs but 3 and 9, and you will have two rows 3 feet 6 inches apart.

In sowing phosphate with corn, use three rows to one of corn; i. e., use the hoes each side of the rows, besides the one in the row.



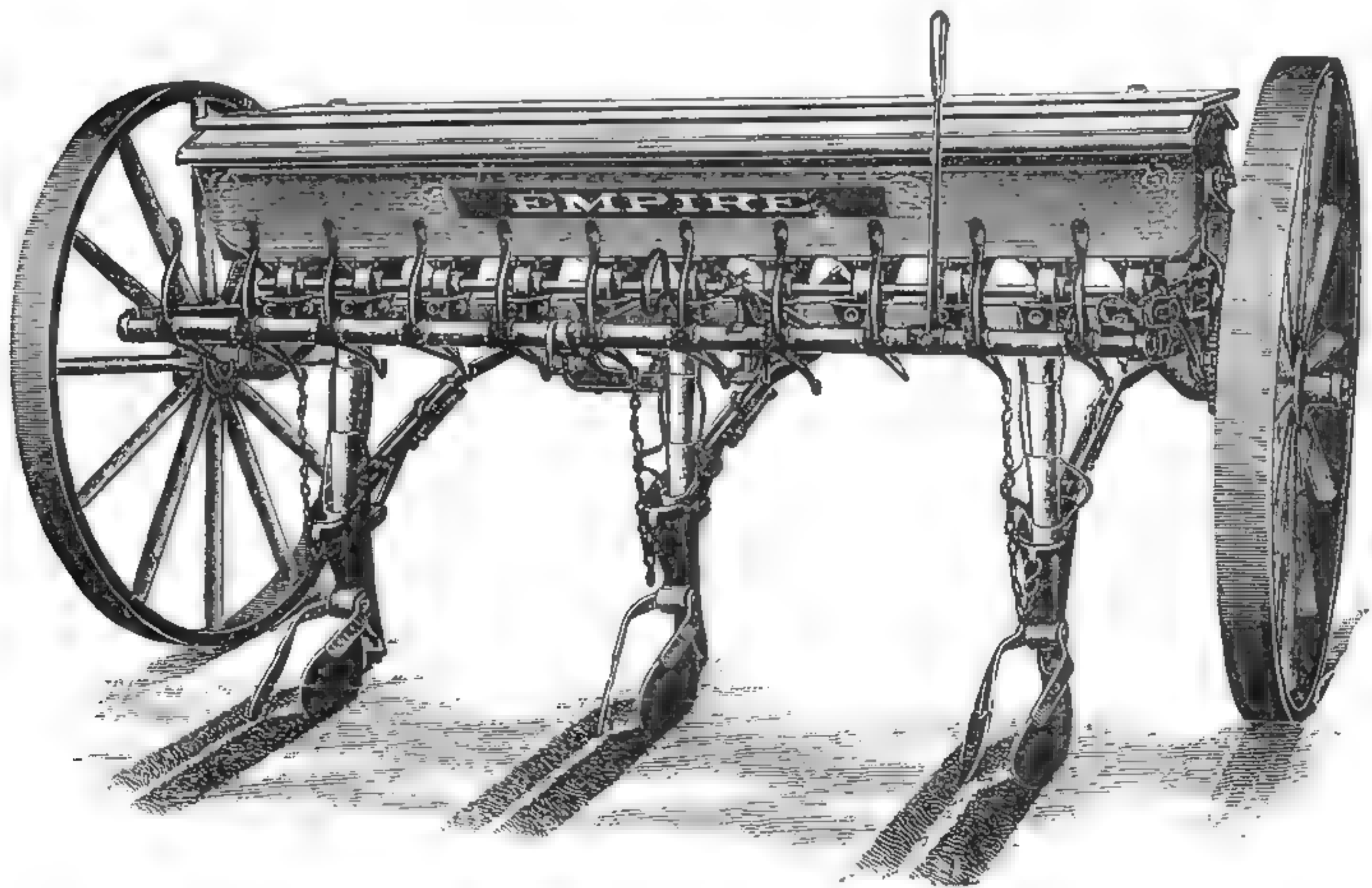
Above is our regular 11-hoe steel-frame grain drill, with all of the hoes taken off except two, with press wheels attached as arranged for planting corn for a field crop.

Empire Hoe Drill for Bean Planting.



It Pays to Plant Beans With an Empire Drill.

We show here an 11-hoe drill arranged for planting beans with our open-center press wheel coverer, all of the drill hoes being removed except three.



Above is our regular 11-hoe steel-frame grain drill, arranged with blade coverers for planting a field crop of beans. With these arrangements three rows are planted 28 inches apart.

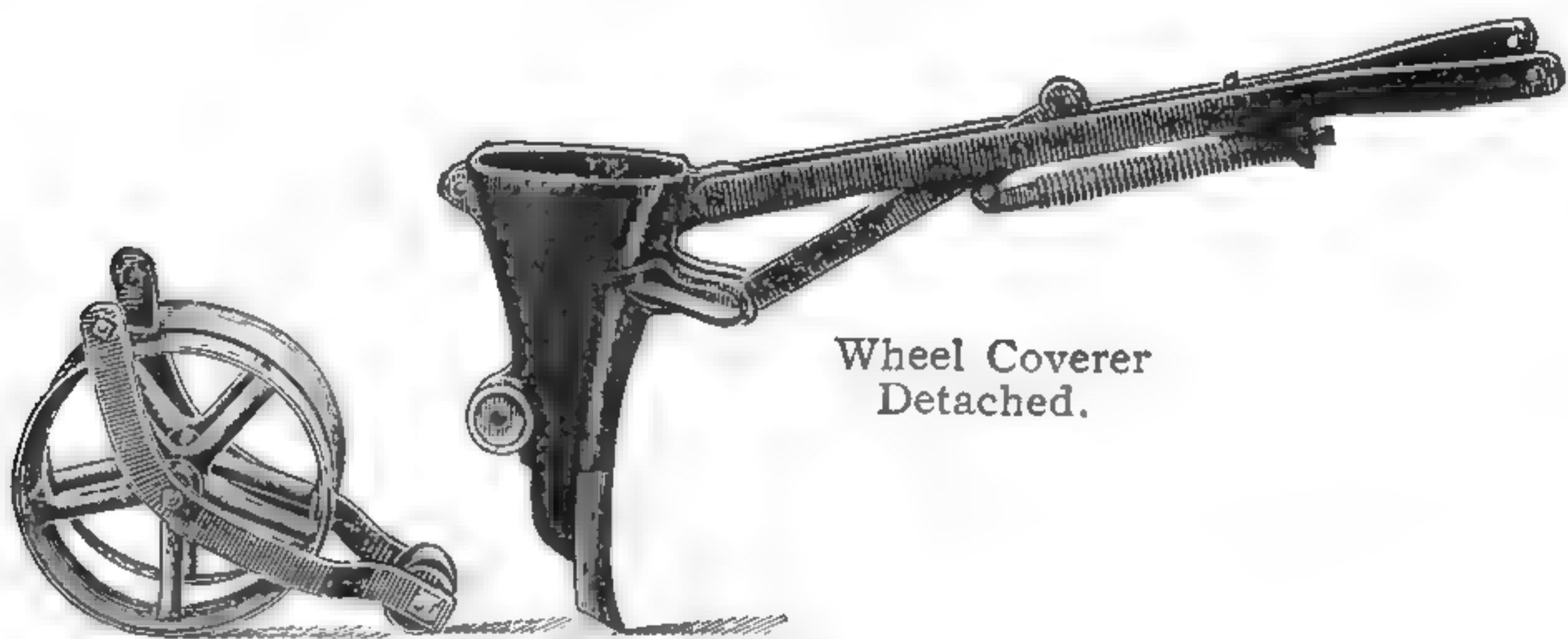
Empire Drill for Planting Beans.

We formerly equipped every 11-hoe drill only with three special feed runs, the right side of which was used for sowing peas and beans, but owing to its wonderful success, we have decided to adopt it exclusively, and all Empire Drills are now fitted with the same feed run throughout.

It pays to make one machine do as many kinds of work as possible. It saves investment of money, storage room and time when it is valuable.

By simply turning the floppers on the inside of the hopper, attaching or detaching the coverers, the machine is ready for grain or beans.

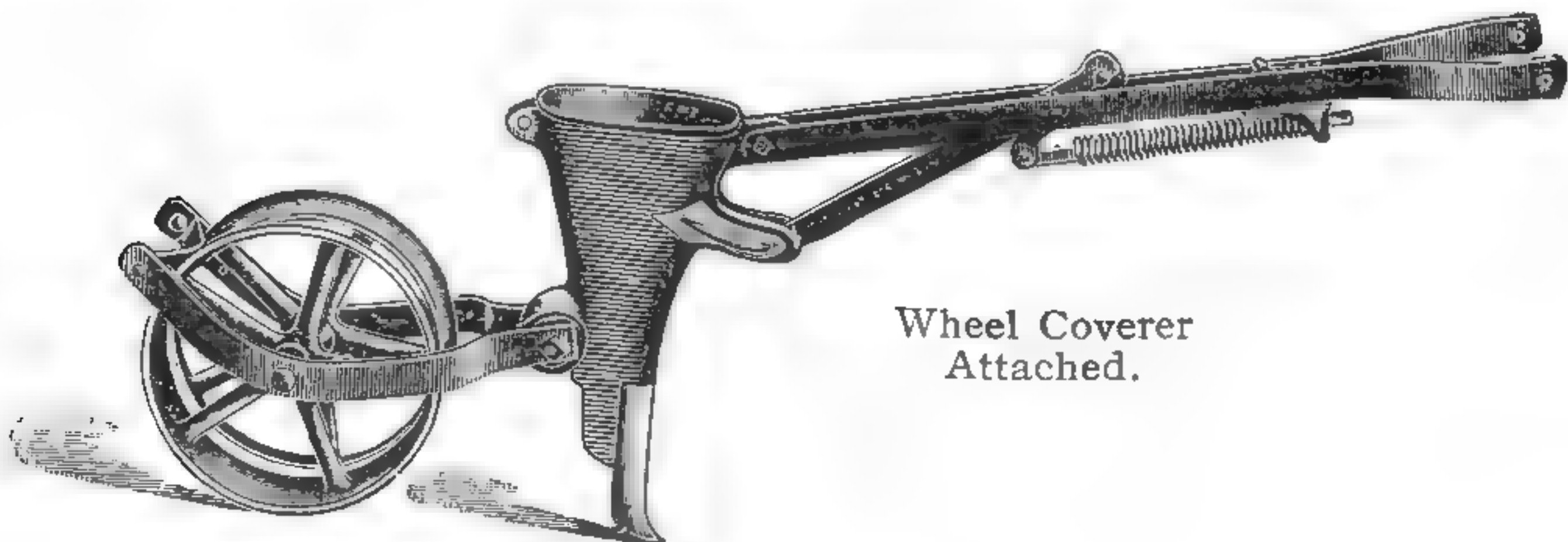
When specially ordered, we equip drills with three or four special hoes for attaching the coverers in place of the regular hoe. There is no extra charge for these when they go out with the machine. (See cut.)



Wheel Coverer
Detached.

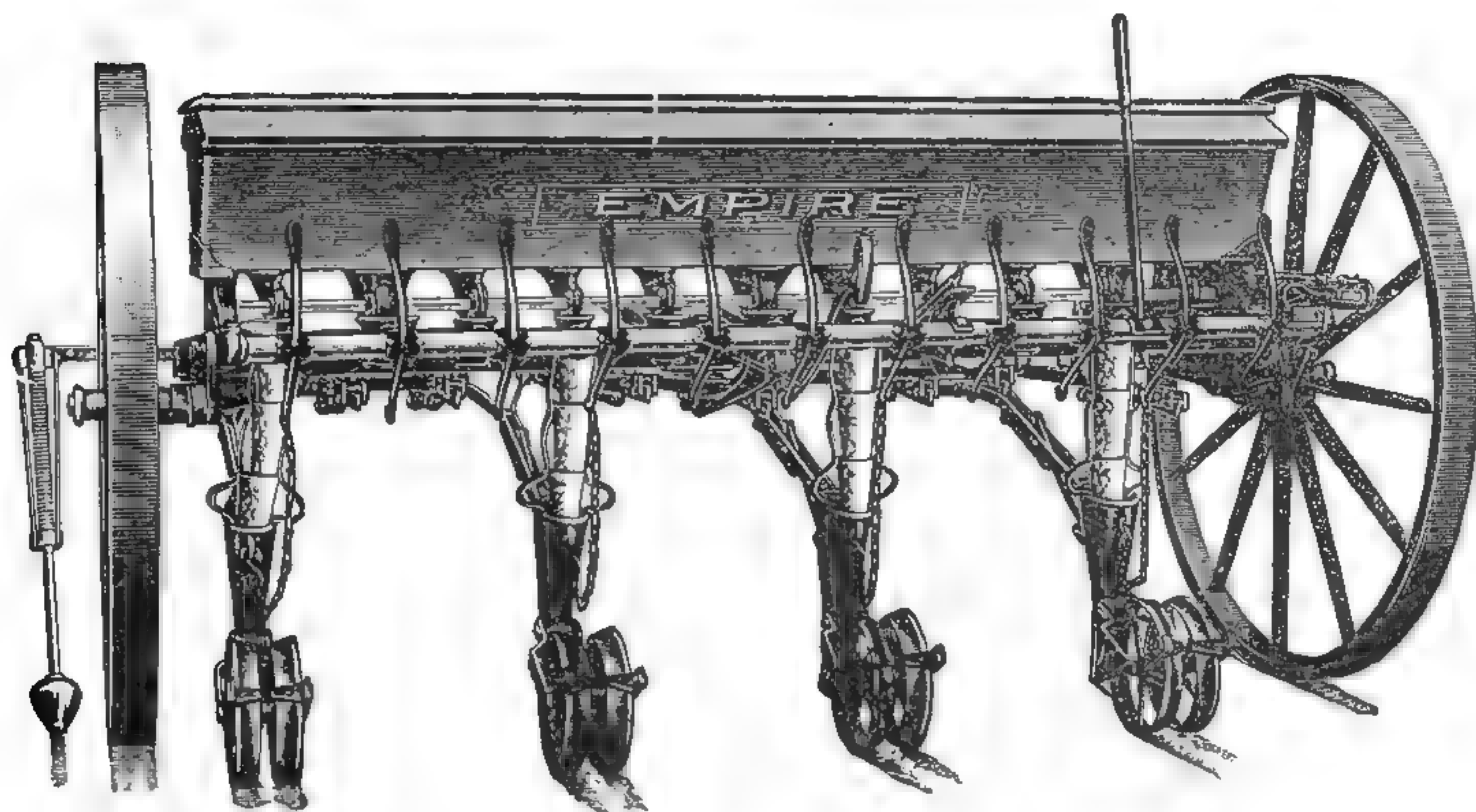
Wheel coverers are furnished at a slight additional cost.

All who have used the arrangement speak highly of its capacity and value, especially in planting Red Kidney Beans, and no farmer should think his assortment of implements complete unless it includes an 11-Hoe Empire Drill with this bean-planting and covering device attached.



Wheel Coverer
Attached.

Empire Drill for Planting Sugar Beets.



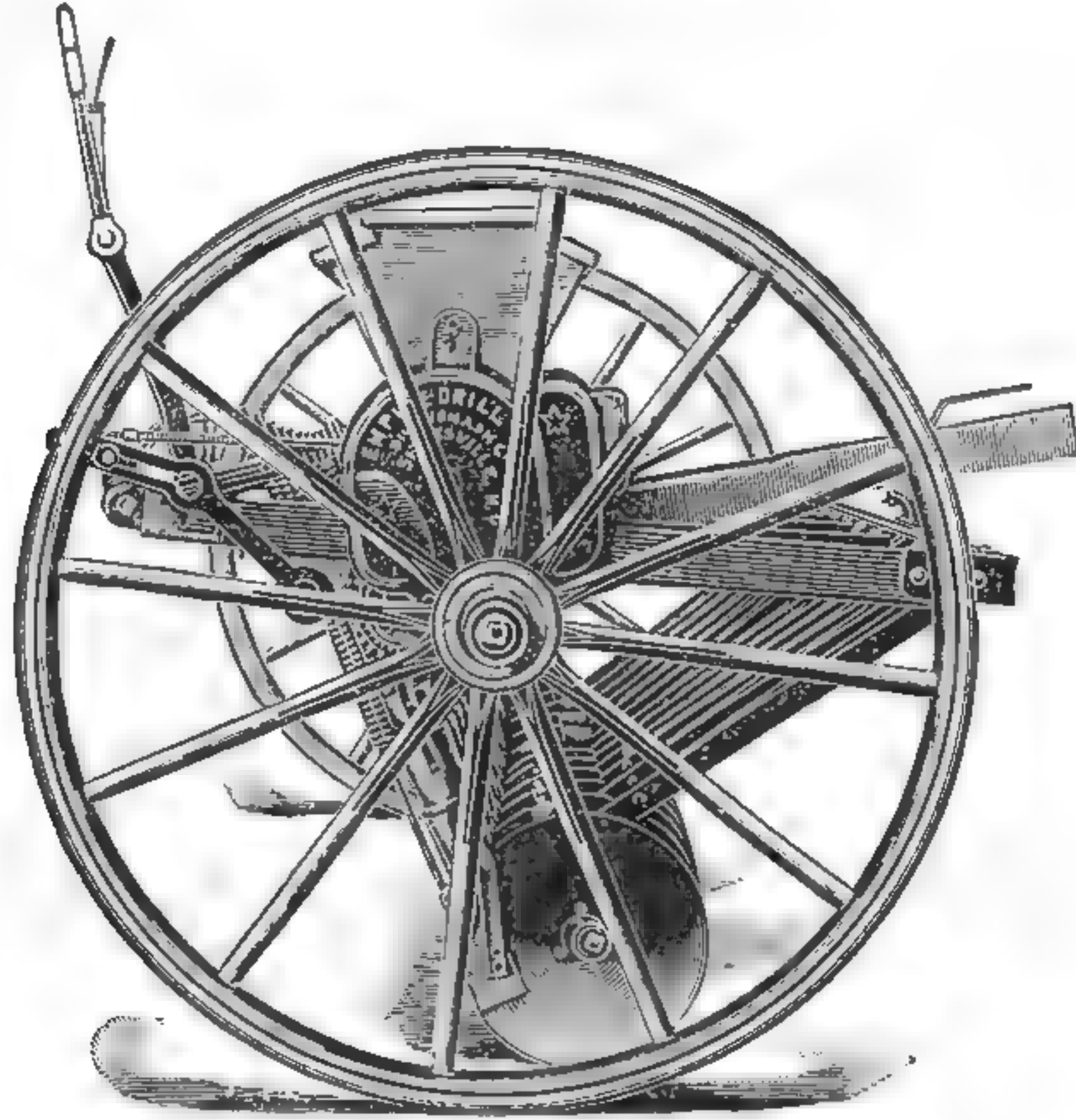
This cut shows how an 11-Hoe Empire Drill can be arranged for planting sugar beets. It will plant four rows 21 inches apart every time across the field. The marker is intended more especially for planting sugar beets, but can be used wherever a marker is needed. In turning to the left, at the end of the field it must be raised to avoid breaking or bending.

The Empire Drill can also be used for planting corn, peas and beans, different distances apart.



On an 11-Hoe or Disc Drill, 7 inches apart, by using No. 2, 6 and 10, you make 3 rows 28 inches apart. By using hoes No. 3 and 9 you sow 2 rows 42 inches apart, and in both cases the wheels will run in the same furrow on the return trip, and thus make all rows the required distance.

Empire Disc Drill.



The above illustration shows an end view of the Empire Disc Drill. Note its clean cut and symmetrical appearance. The strong, straight high-carbon steel draw bars. The manner in which the pressure is applied to the discs. There is no place for corn-stalks or trash of any description to lodge. The compact, strong construction of the EMPIRE has always pleased farmers who appreciate honest workmanship and highest grade material.

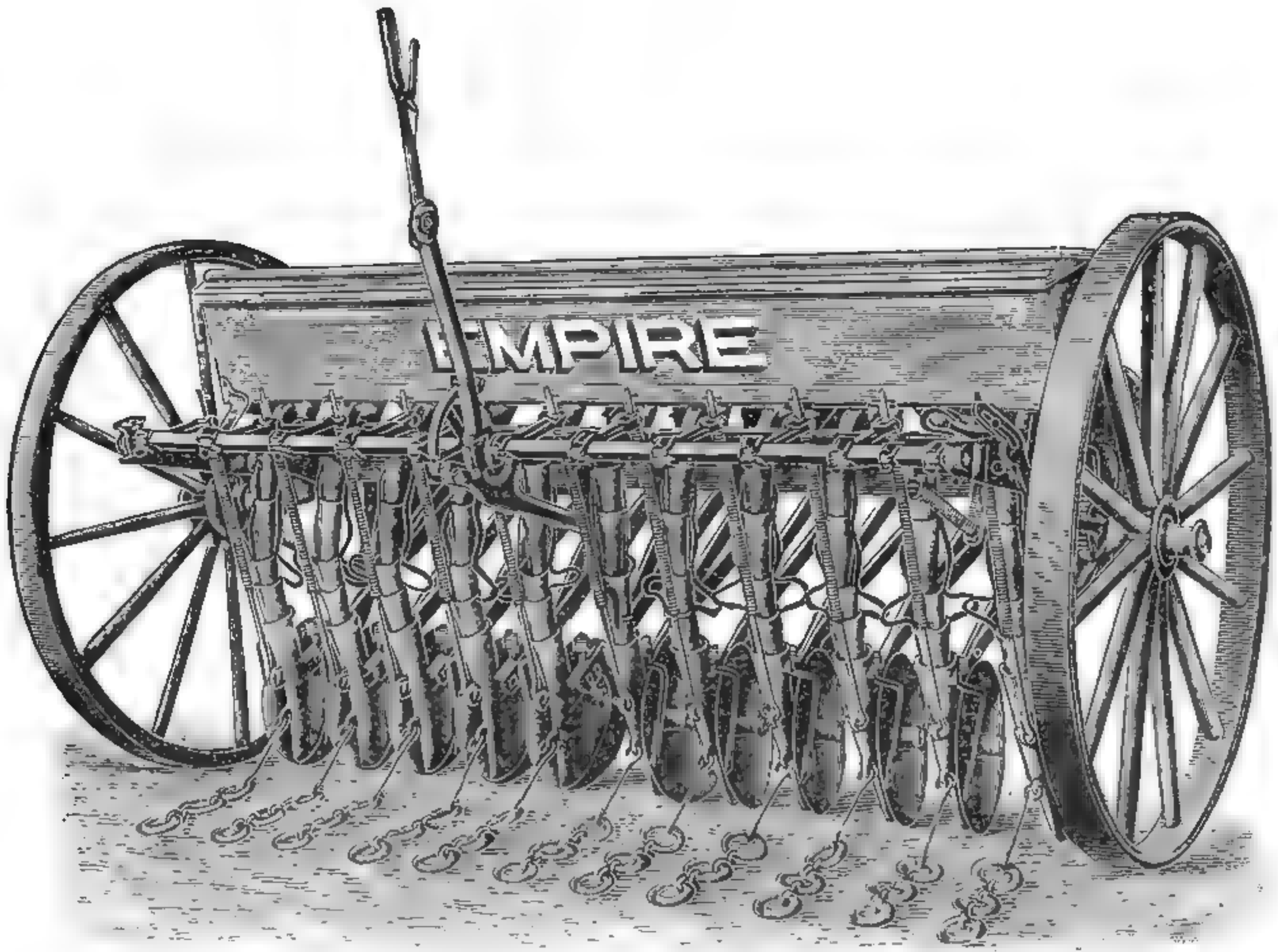
We manufacture these drills in all sizes and styles—plain or fertilizer. They are strongly made, firmly braced, and so designed that the seed is deposited in the bottom of the furrow opened by the disc, none being scattered on the surface and left uncovered.

One of the most important points of disc drill construction is to rigidly hold the disc at all times at a true cutting angle. On the EMPIRE this end is accomplished by the use of an extra heavy draw bar, strongly braced to prevent lateral motion.

They are provided with chilled bearings, steel scrapers, dust-proof hard oilers, and are practically indestructible.

The rock shaft for raising or lowering the discs is square steel, supported by the truss which prevents any sagging out of line.

Empire Plain Disc Drill.



Rear View Empire Plain Disc Drill.

Above cut shows an Empire Plain 11-Disc, 7-inch drill; a very popular size—made for business. Sows accurately all kinds of small seed, as well as corn, peas, beans and all large seeds. The construction is the same as all Empire Disc Grain Drills. (See pages 3 and 4 for description of frame—page 18 for description of disc and draw bars.)

Large sizes have two lifting levers.

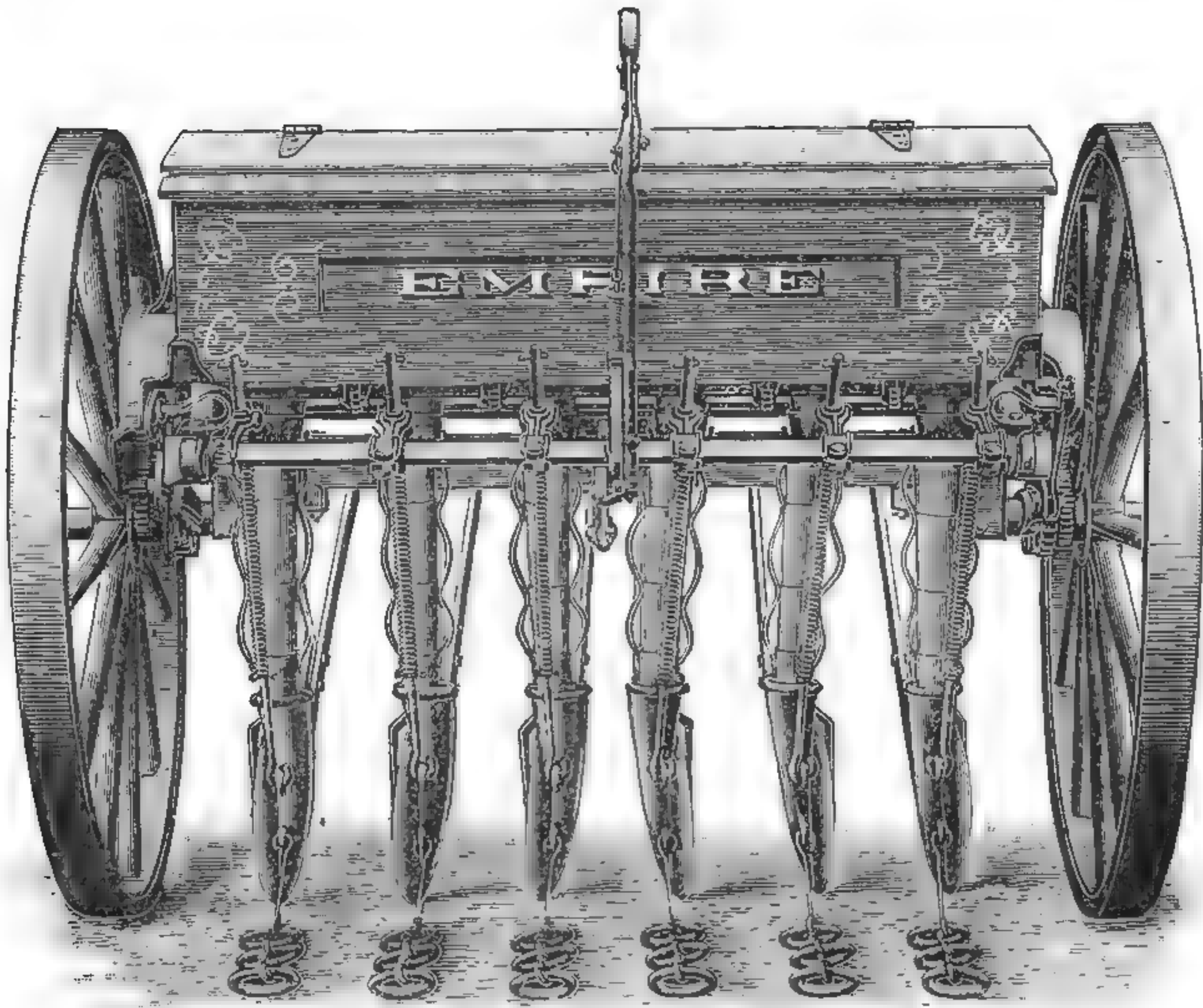
STANDARD SIZES.

6, 8, 10, 14 and 16 Discs, 8 inch.

9, 10, 11, 12, 14, 16, 18 and 20 Discs, 7 inch.

10, 11, 12, 14, 16, 18 and 20 Discs, 6 inch.

Empire Fertilizer Disc Drill.

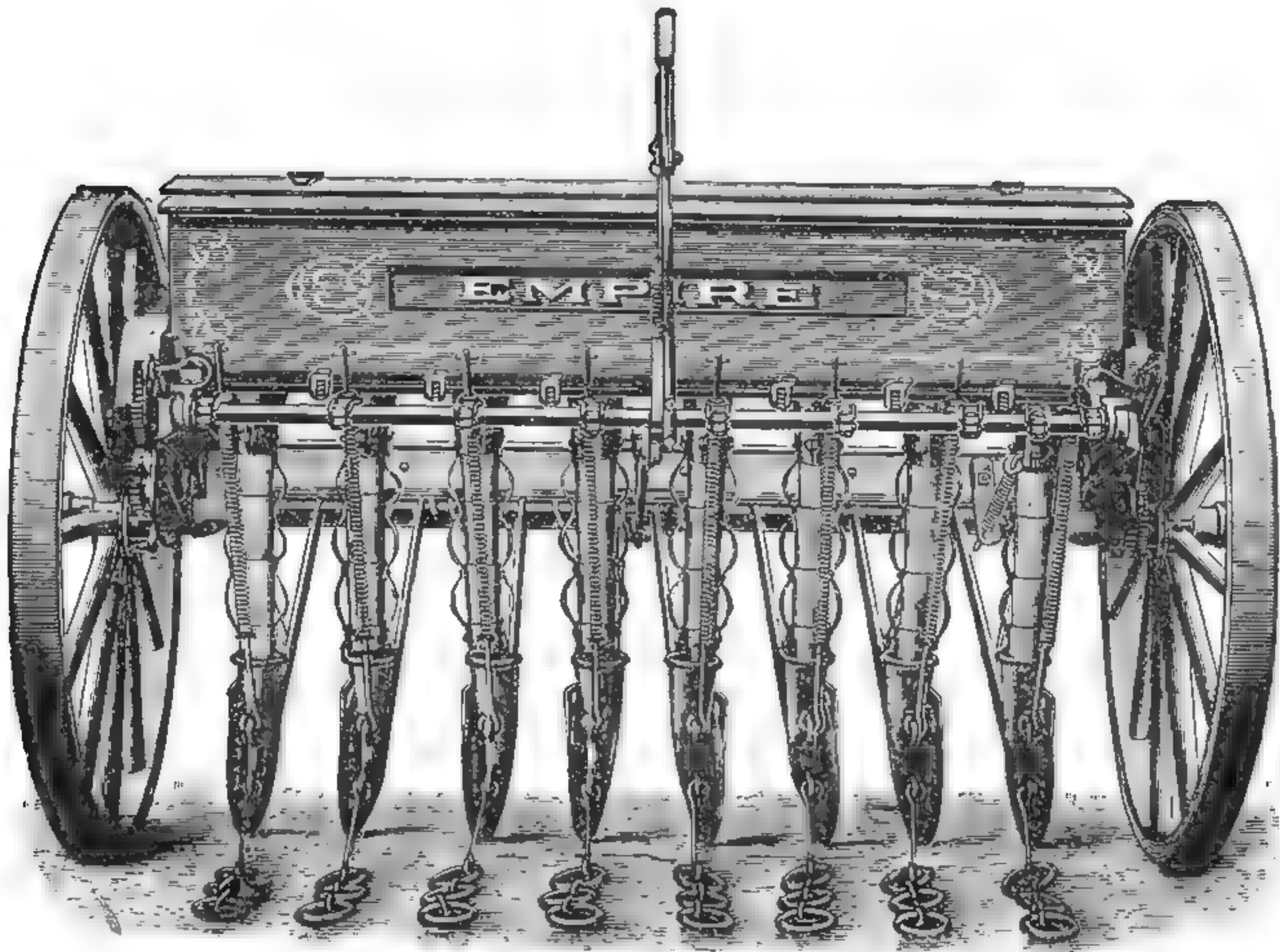


Empire Six-Disc Fertilizer Drill.

The above illustration shows the Empire Six-Disc Grain Drill. This type of drill is used mainly in the Southern States and mountainous regions, or by farmers who use small, light-weight teams. It has all the good features that have won name and fame for the Empire Drill among progressive grain-raisers everywhere.

Light Weight and Light Draft make it a very popular size for small farmers.

Empire Fertilizer Disc Drill.

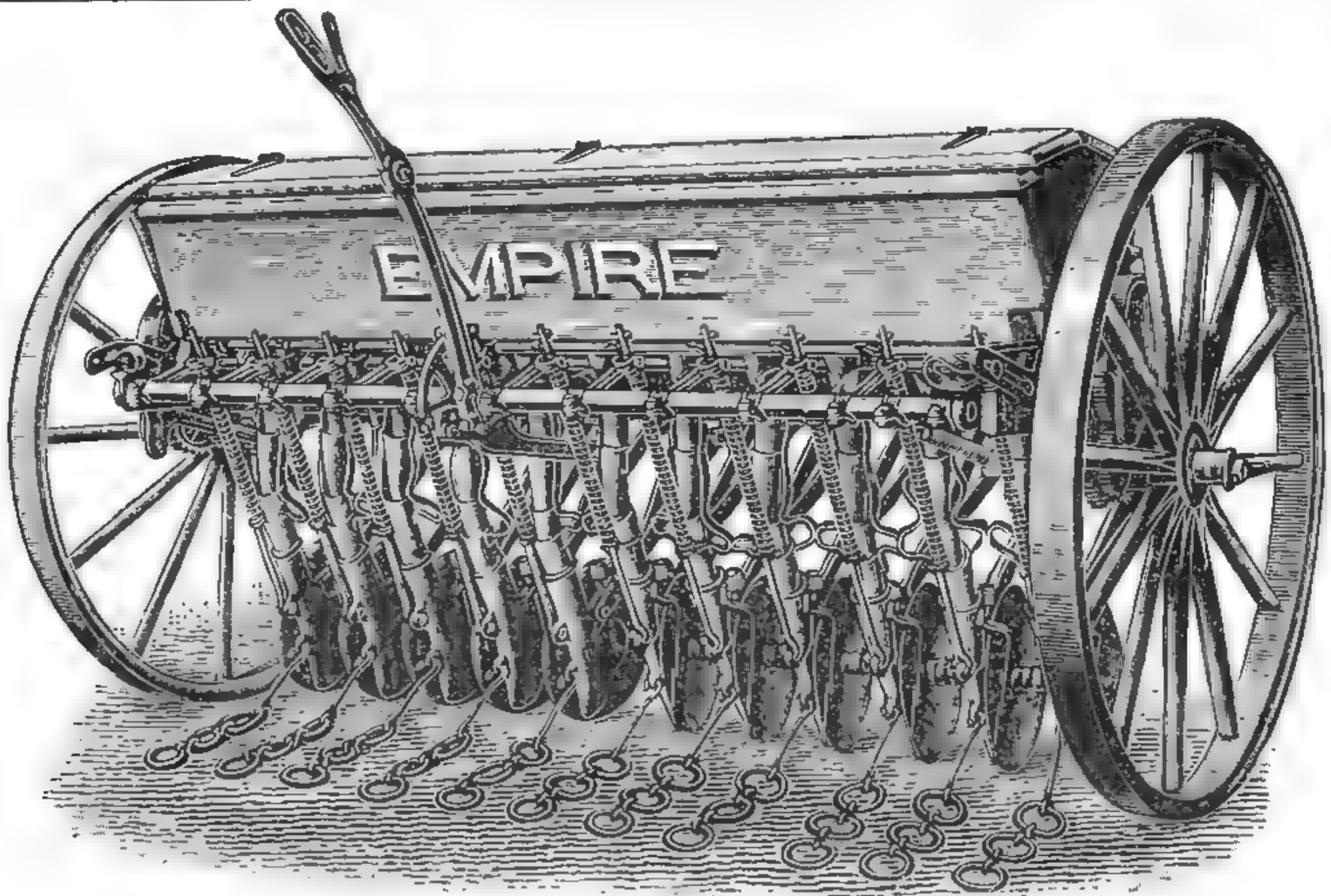


Empire Eight-Disc Fertilizer Drill.

This cut gives a good idea of the Empire Eight-Disc Drill. Among farmers who demand an exceptionally light-draft grain drill, on account of the light-weight teams used, the Empire has proven its efficiency and met the requirements of the most exacting. It has all the improvements and good features found on Empire Disc Drills of larger sizes.

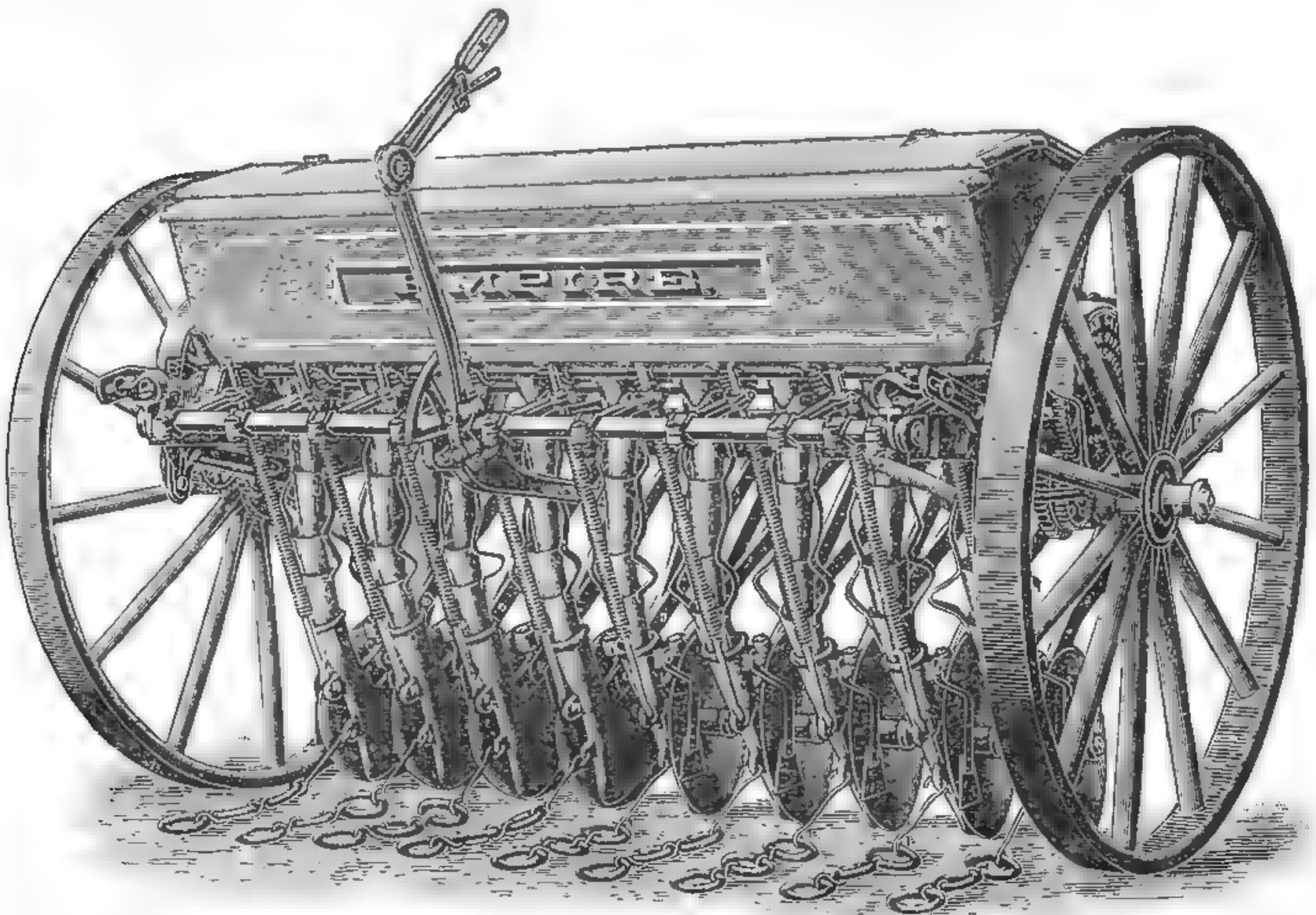
Disc Drills have come to stay; their many good features are well known. Do not clog in trash. Work in any kind of soil. The Empire has many improvements.

Empire Fertilizer Disc Drill.



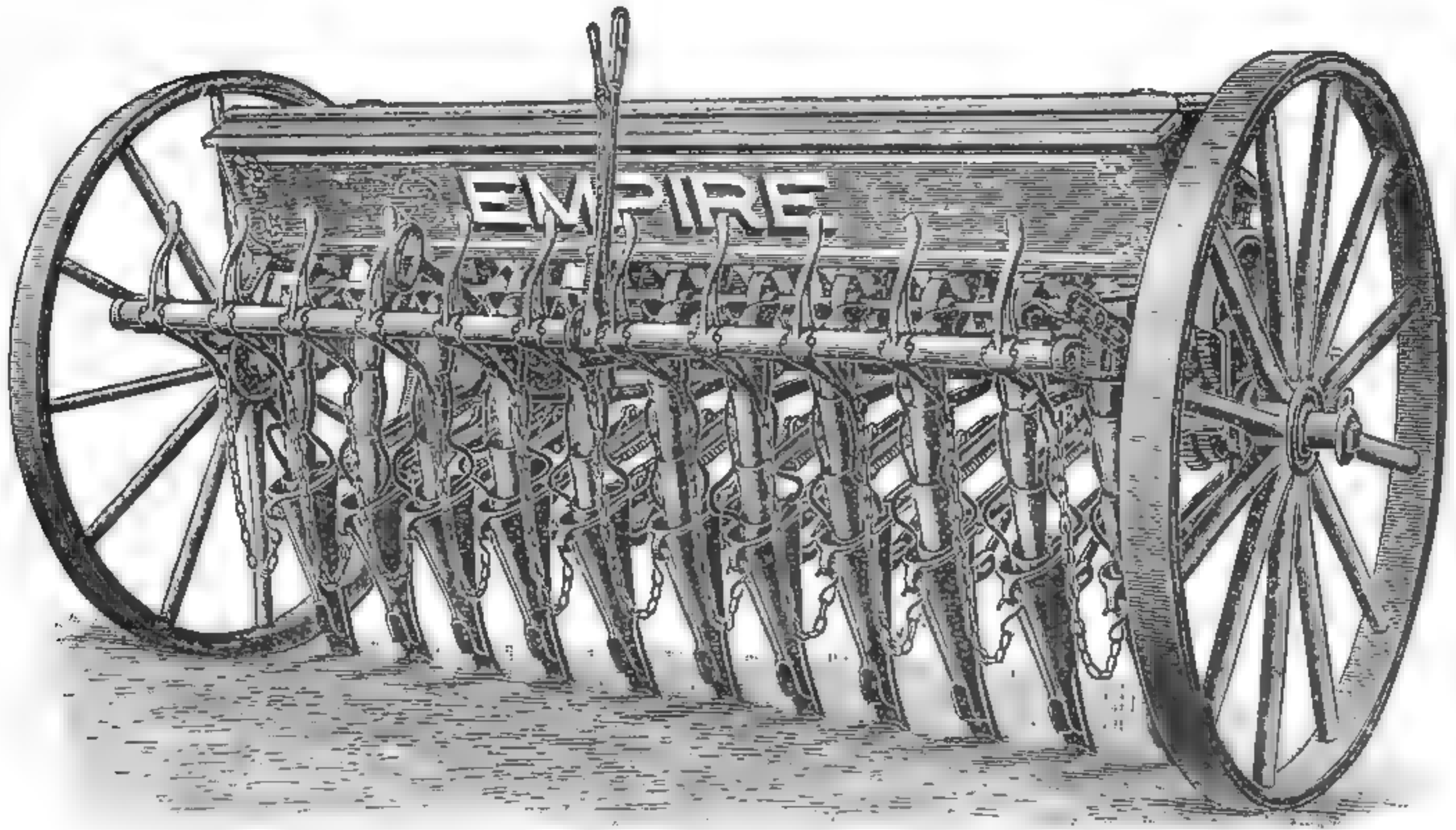
Empire Fertilizer 11-Disc Drill.

We herewith illustrate an 11-Disc EMPIRE Fertilizer Drill. All EMPIRE Fertilizer Drills are equipped with the famous EMPIRE "MARKS" Force Feed. (See pages 11, 12 and 13 for description.) General construction is the same as on all EMPIRE Drills.



Empire Fertilizer 9-Disc Drill.

Empire Plain Hoe Drill.



The Empire

Hoe Drill has been on the market for over fifty years. Thousands of farmers, the world over, are pleased with its work. General construction of frame, wheels, grain feed, etc., is same as all EMPIRE Drills. Ample zigzag capacity is provided for, to permit clods and surface trash to pass between the hoes.

Draw bars attached to hoes are of equal length.

Shifter lever is convenient and easy to handle.

Furnished with either Break Pin or Spring Hoes.

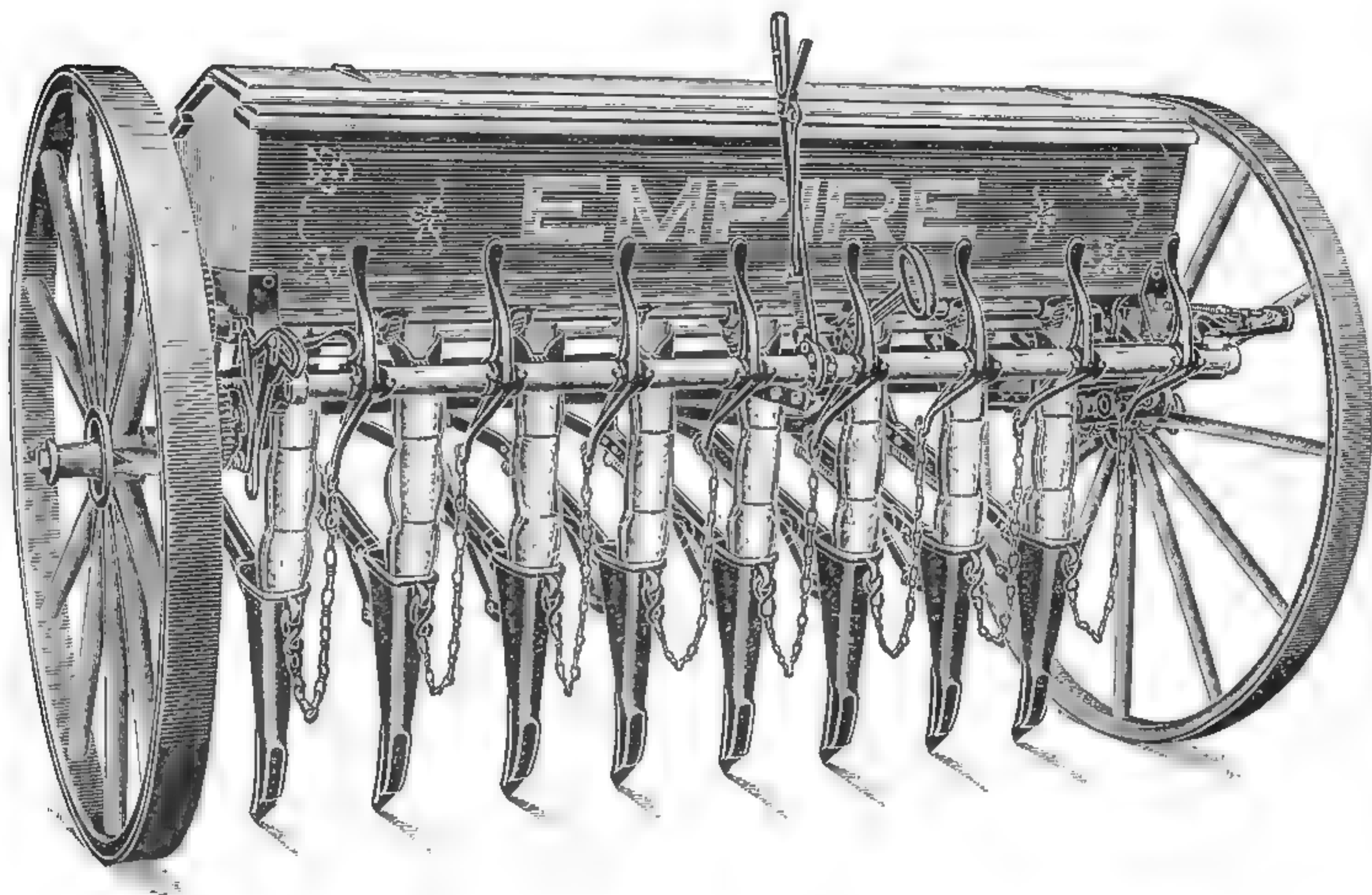
STANDARD SIZES.

8, 9, 10, 12, 14, 16 and 18 Hoes, 8 inch.

9, 10, 11, 12, 13, 14 and 18 Hoes, 7 inch.

10, 11, 12, 13, 14, 16 and 18 Hoes, 6 inch.

Empire Fertilizer Hoe Drill.



Rear View Empire Fertilizer 8-Hoe Drill.

A very popular and convenient Drill; it has the same strong angle steel frame—the same grain feed—the same EMPIRE “MARKS” FORCE FERTILIZER FEED. The same EMPIRE features.

Lifting chains are provided in rear for raising any one or more hoes to clear trash.

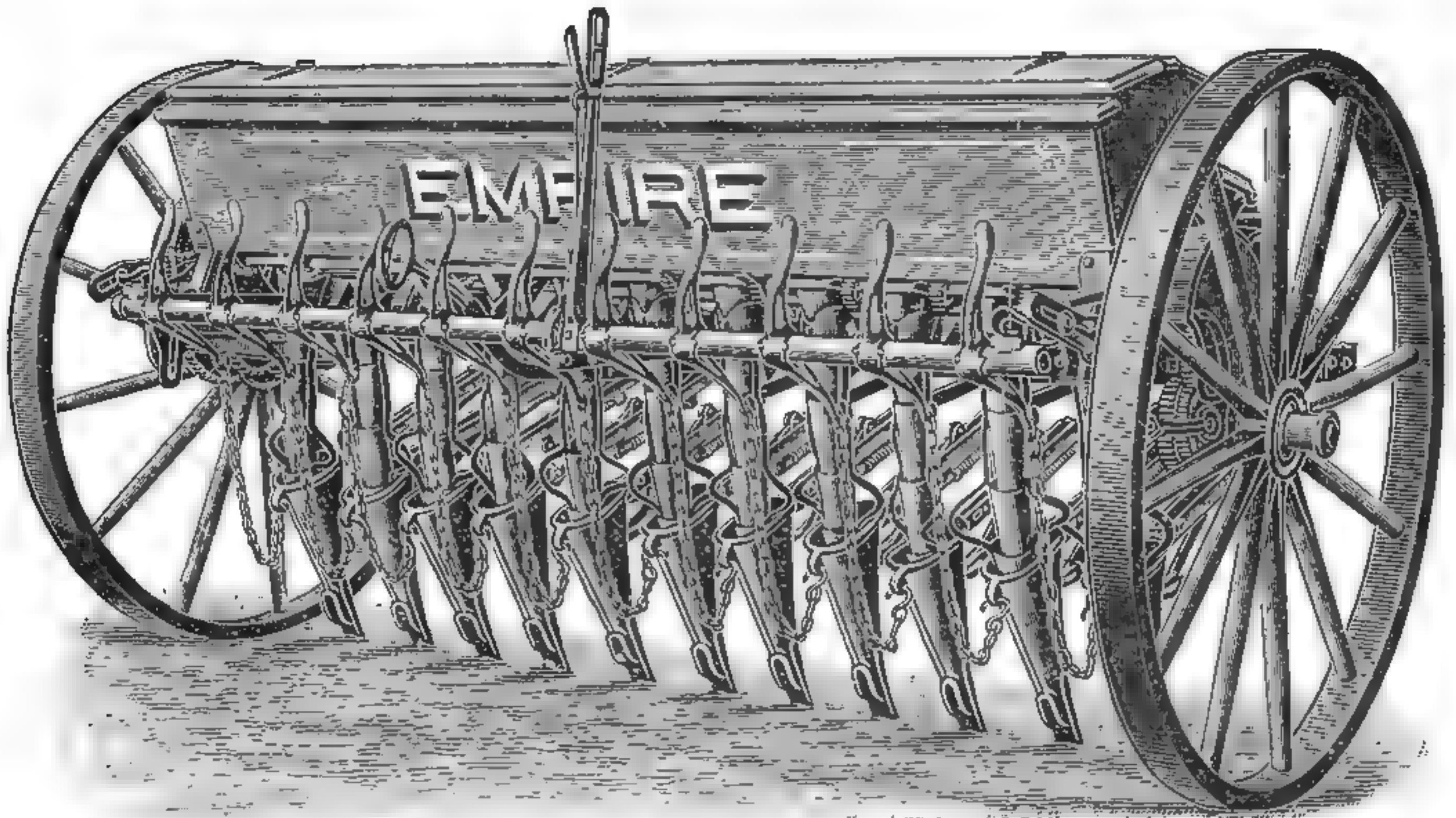
All hoes are independent and adapt themselves to uneven ground. The best and most satisfactory drill for rough, hilly country. Furnished with either Break Pin or Spring Hoe.

STANDARD SIZES.

6, 8, 9, 10, 11 and 12 Hoes, 8 inch.

9, 10, 11 and 12 Hoes, 7 inch.

Empire Fertilizer Hoe Drill.

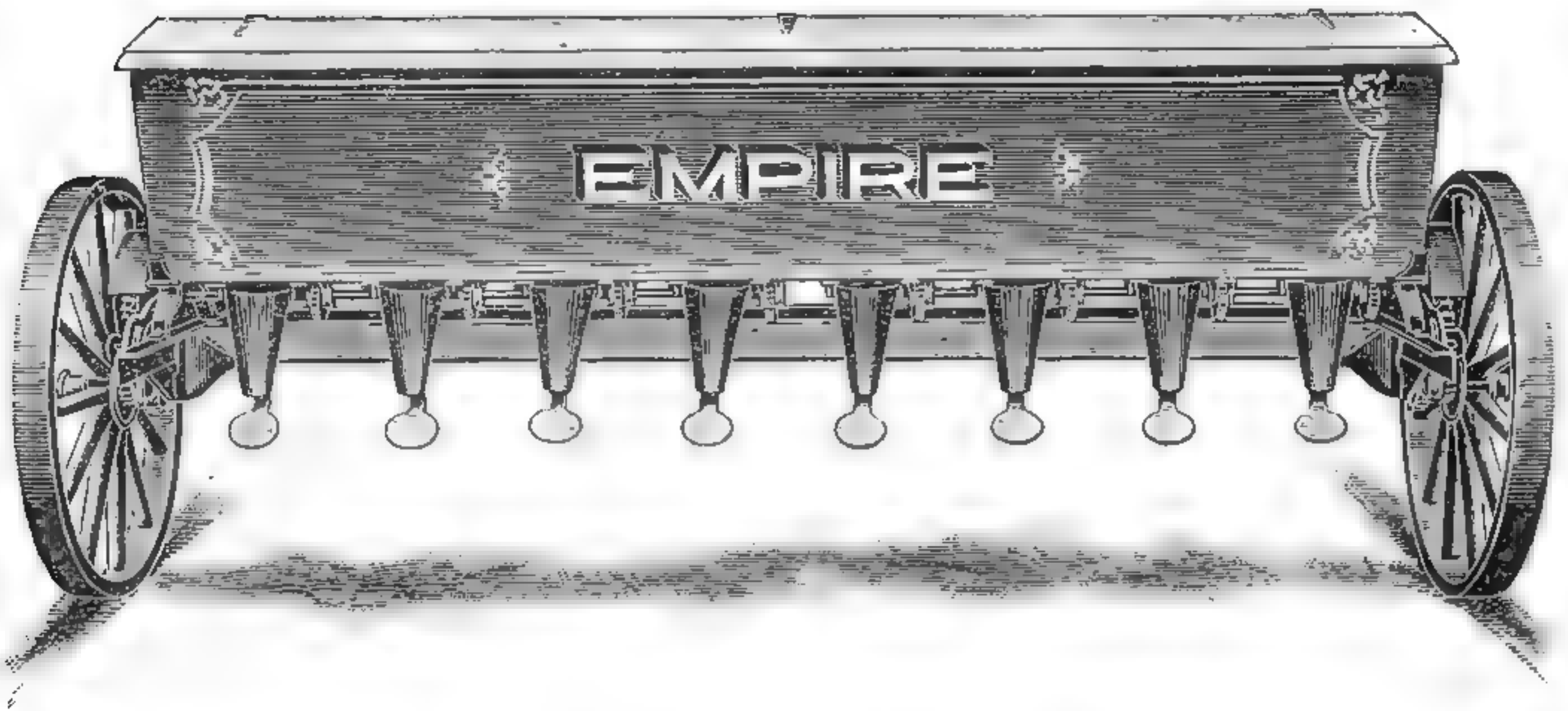


Empire Fertilizer 11-Hoe Drill.

EMPIRE Drills are distinctive and do their work in a highly satisfactory manner. Are well made of the best material to be found. We do not make or advertise cheap machines. More than fifty years of practical experience has enabled us to produce machines that are in every respect second to none. There is nothing experimental in the make-up of the Empire. It has been thoroughly tested by progressive, up-to-date farmers in all grain-raising parts of the world, and by them heartily and honestly endorsed and recommended.

All Empire Hoe Drills are furnished in either Break Pin or Spring Hoes.

Empire Broadcast Fertilizer Sower.



Rear View Empire Broadcast Fertilizer Sower.

The Empire Broadcast Fertilizer Distributer and Lime Sower is a valuable machine for sowing broadcast commercial fertilizer, lime, plaster, salt, etc.

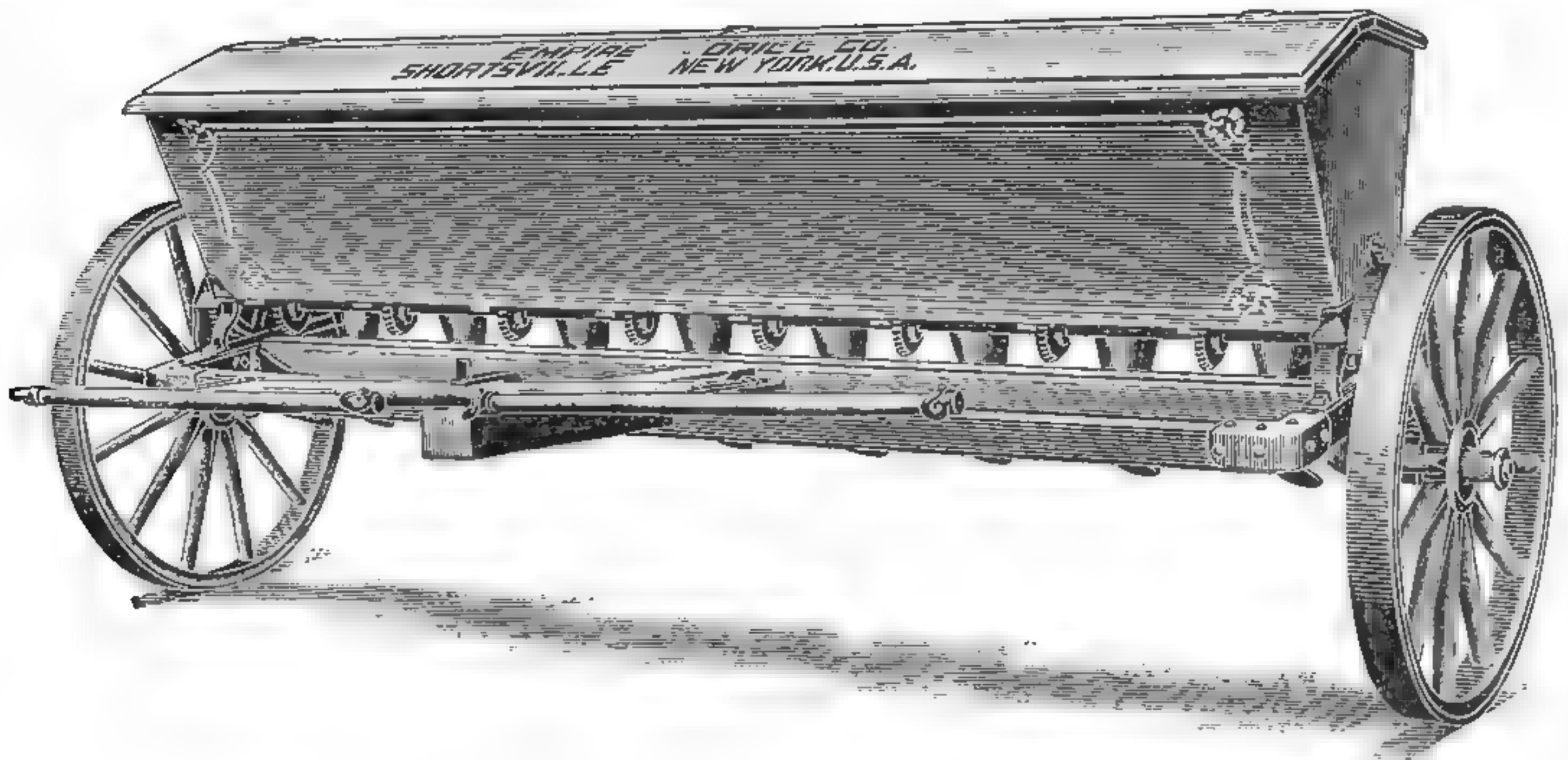
MATERIAL.—The material that enters into its construction is selected with the greatest care, and nothing but well seasoned lumber and the best of steel and malleables are used; thus insuring a machine of great durability.

CONSTRUCTION.—This machine is especially adapted for sowing a large quantity of lime per acre. Certain grades of lime are exceedingly difficult to handle and very hard on a machine.

THE HOPPER is very strong and has an extra large carrying capacity.

THE EMPIRE "MARKS" FERTILIZER FEED is a positive force feed; much better than the various agitator feeds on cheap machines.

Empire Broadcast Fertilizer Sower.



Front View Empire Broadcast Fertilizer Sower.

THE NEW EMPIRE has a capacity of from 200 to 2500 pounds of commercial fertilizer. From 500 to 2000 pounds of lime per acre. A very satisfactory and wide range of quantity.

We mount the Empire Broadcast Fertilizer Sower on broad tired wood wheels of the very best make. The wheels are low, bringing the machine near the ground. They are hung in the proper manner to make a light running machine.

Special attention is called to the galvanized iron scatterer tubes or spouts. Note their construction, which is such that the fertilizer is spread in an even thin sheet over the surface of the ground. The discharge from the scatterer tubes being close to the ground.

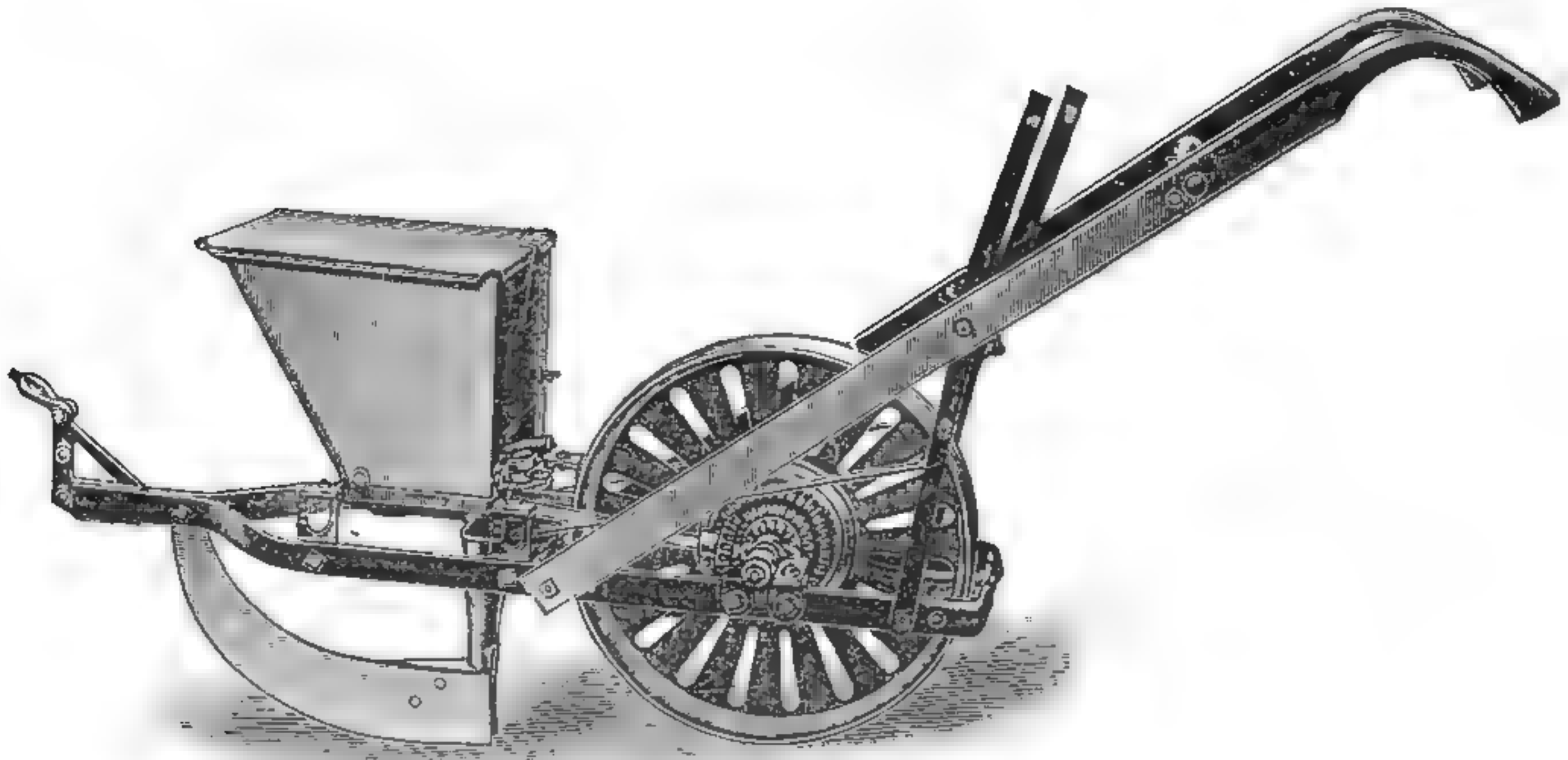
EMPIRE BROADCAST FERTILIZER SOWER is made in one size only.

8 ft. with eight tubes, sows 96 inches in width.

This machine is regularly equipped with pole, double trees and neck yoke for two horses.

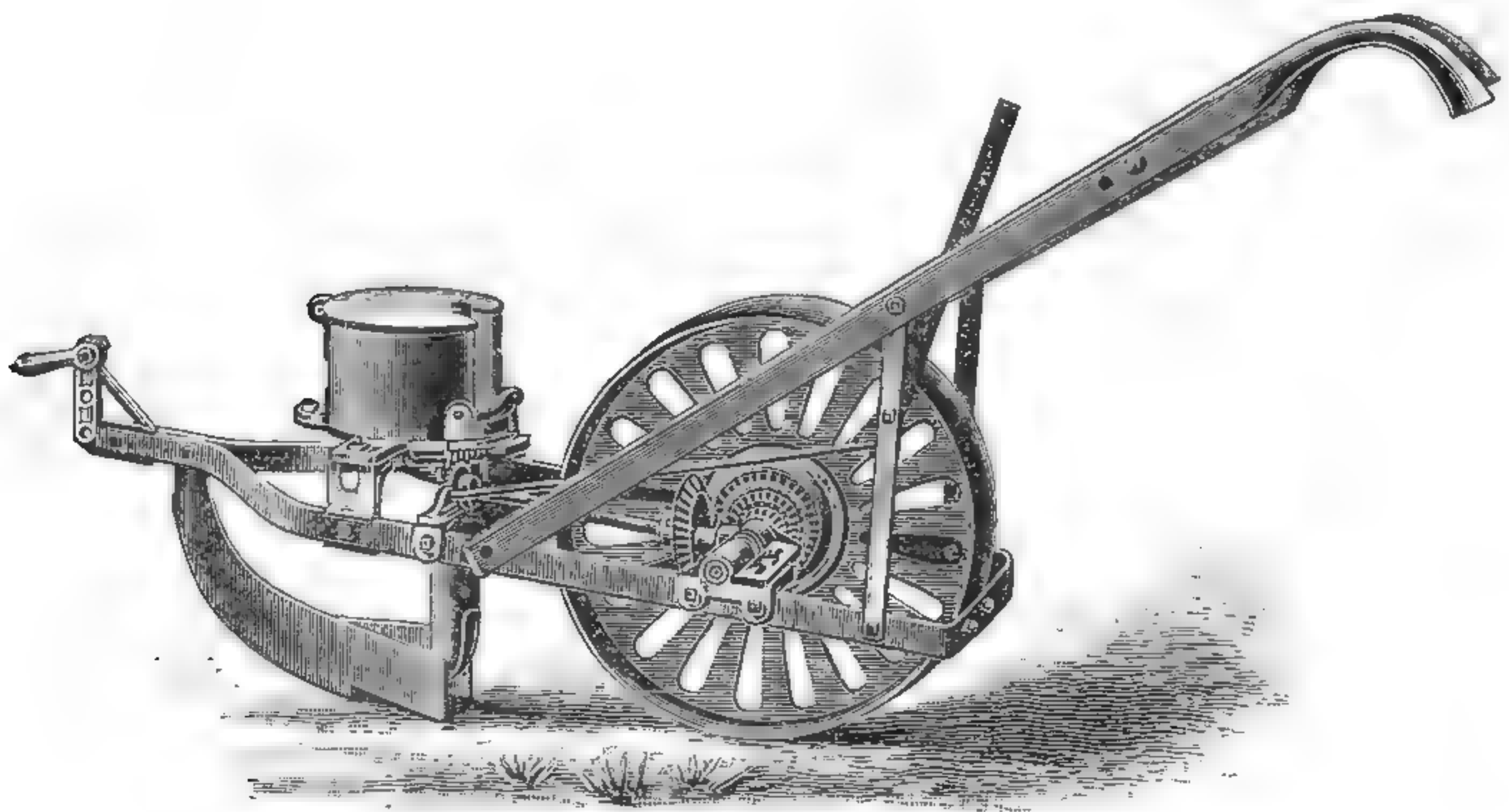
We have a neat, compact, light running machine, with a large range of quantity; large carrying capacity; built close to the ground; simple in construction; a positive force feed; well made and satisfactory in every respect.

Empire Shoe Corn Drill.



Empire Fertilizer Shoe Corn Drill.

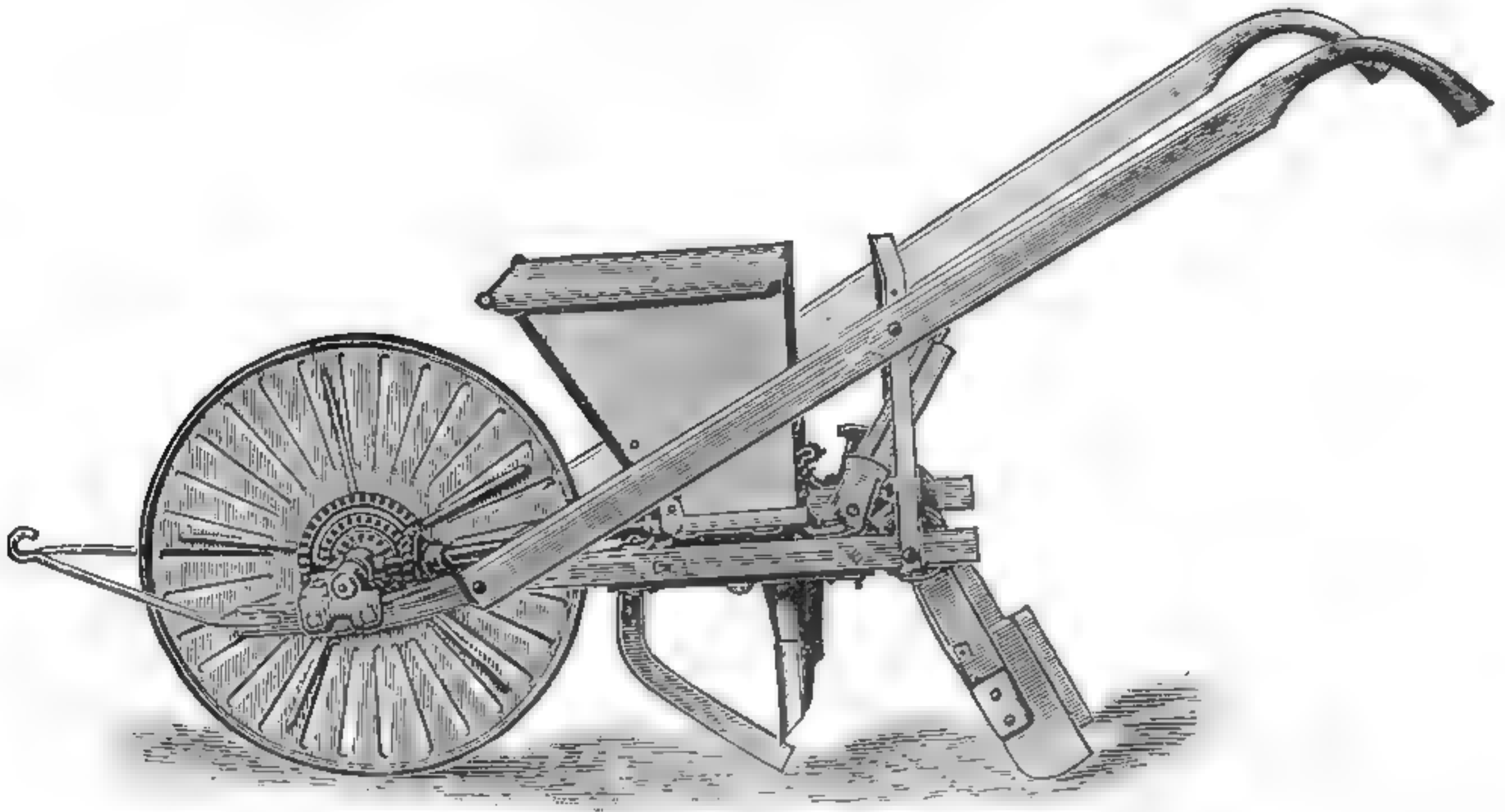
Everyone knows that it is satisfactory. "Marks" Force Feed Fertilizer Distributer. Light, strong, durable and satisfactory.



Empire Plain Shoe Corn Drill.

Frame is well braced, rigid and strong. All metal except the handles. Built for business and satisfies every time.

Empire Hoe Corn Drill.



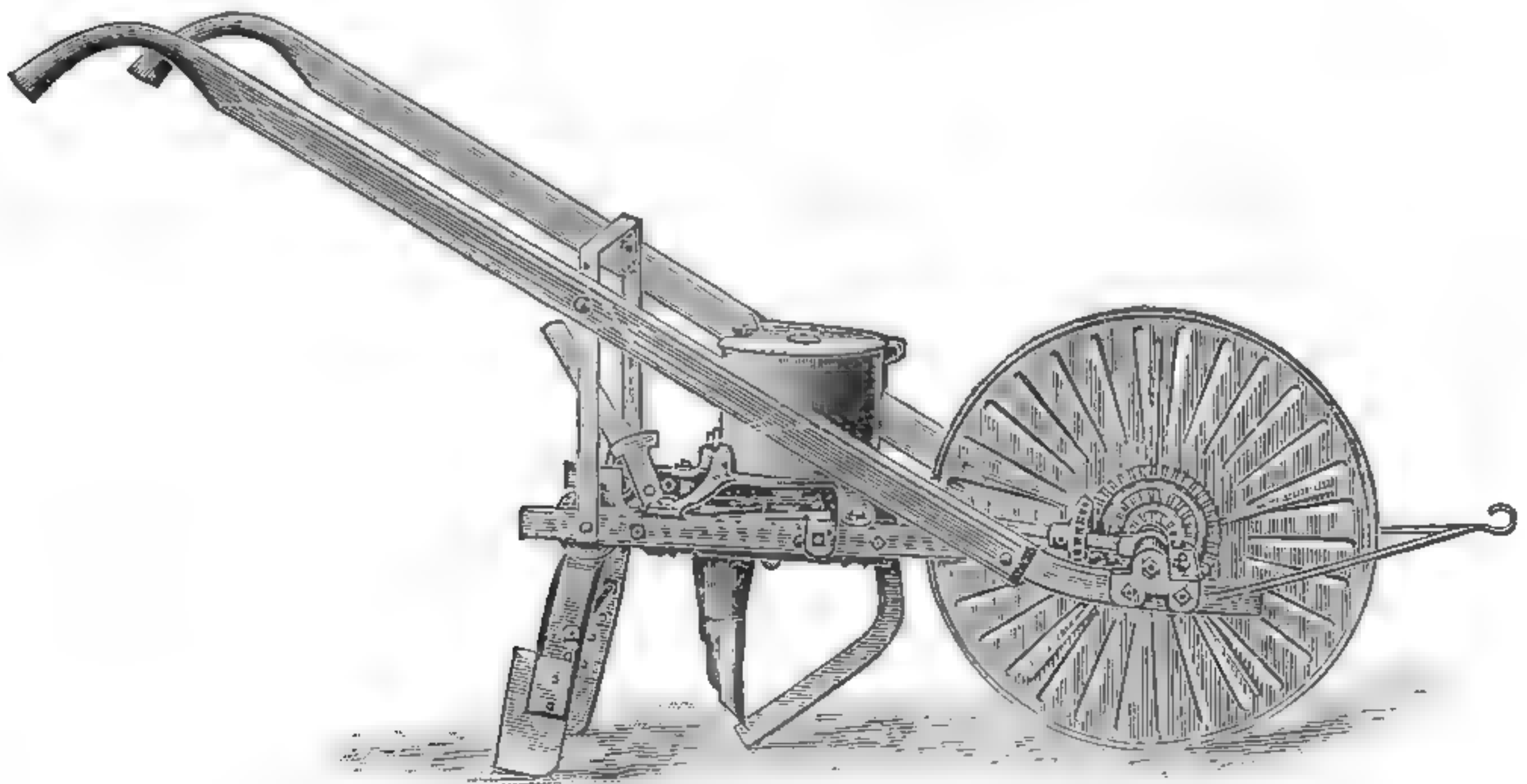
Empire Fertilizer Hoe Corn Drill.

Compact, light and strong. The box, of galvanized steel, adjusts and equalizes the weight of the load.

All steel except the handles.

Empire "Marks" Force Fertilizer Feed.

Wheel coverer instead of blade coverer, if desired.



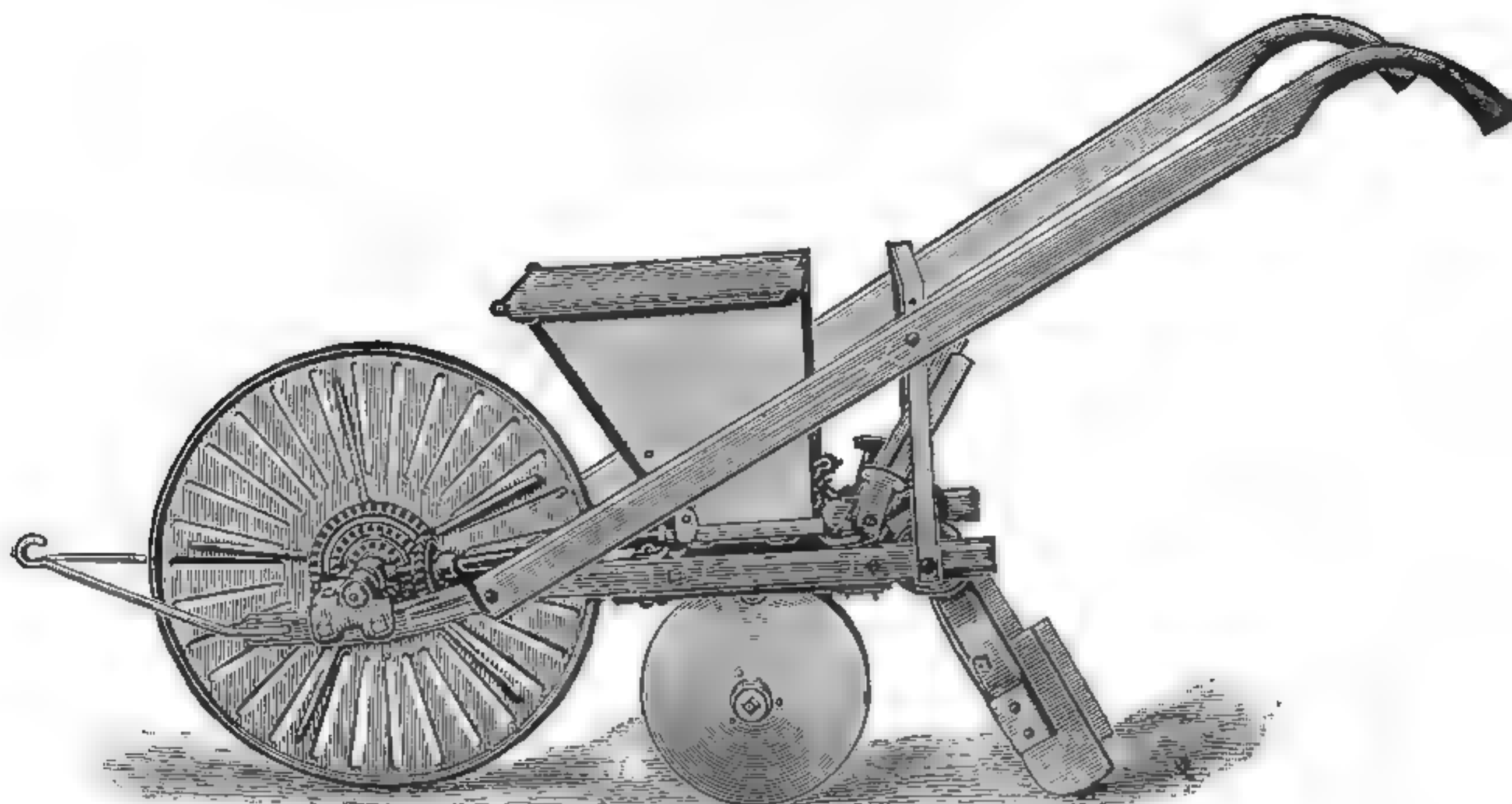
Empire Plain Hoe Corn Drill.

Neat, light and strong. Can be made to do almost any kind of planting.

All steel except the handles.

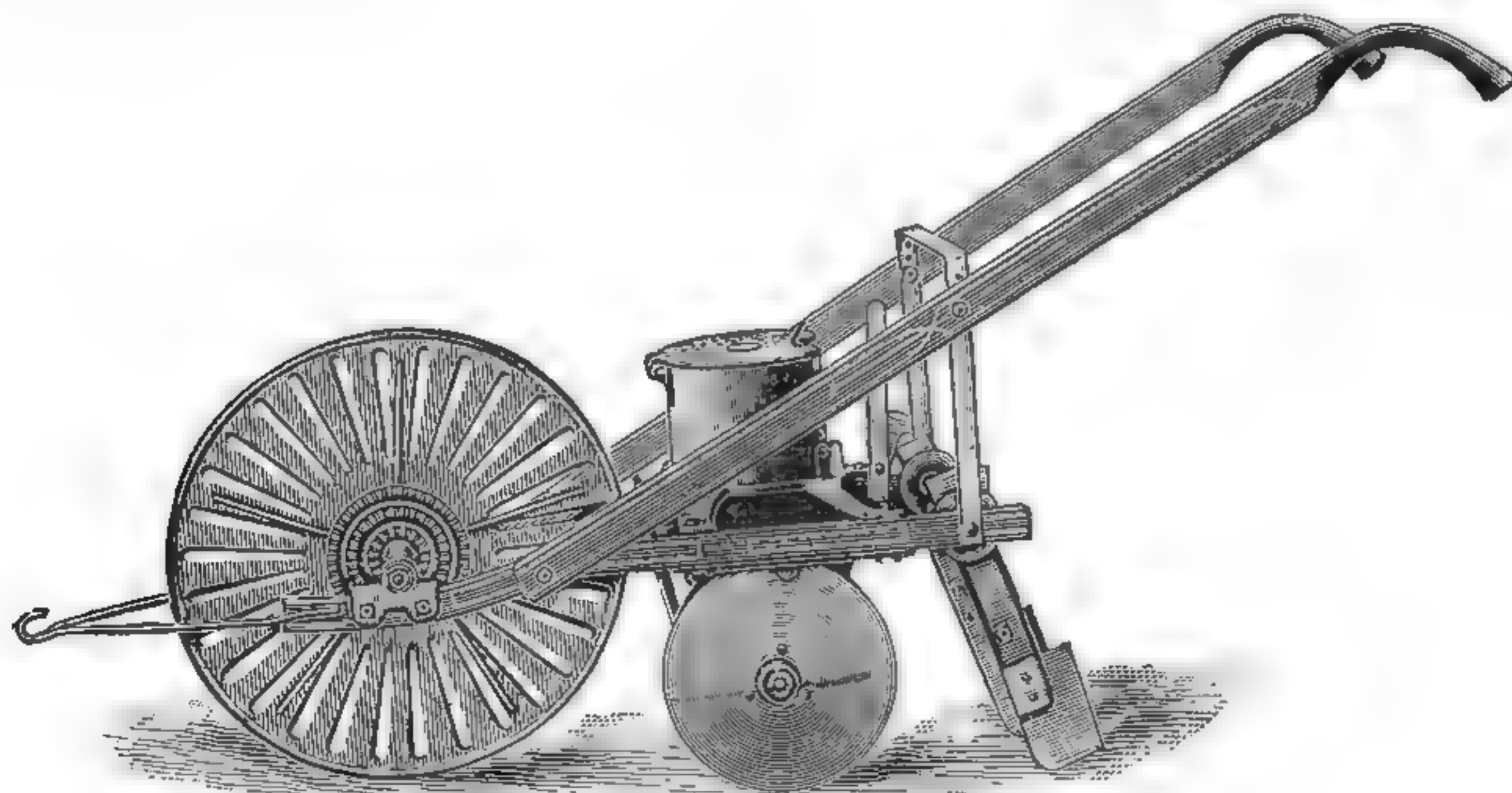
Wheel coverer instead of blade coverer, if desired.

Empire Disc Corn Drill.



Empire Fertilizer Disc Corn Drill.

Same as the Empire Hoe Corn Drill, except the twin disc furrow openers. No guess work—two dropping plates with each drill; one for large corn and one for small corn. Special plates can be furnished. Discs do not gather trash.



Empire Plain Disc Corn Drill.

None better. Discs mounted in a substantial manner—set at an angle to each other so that they join at the front and stand apart in the rear.

Either blade or wheel coverer.

See small circular for full description of Empire One-Horse Corn Drills.

Empire Drill Company.

GENERAL REMARKS.

The quality of material used in the construction of our goods is the best for the purpose we can buy.

It is manufactured and put together by workmen, most of whom have been in our employ for years and have become skilled in our particular work. We make everything from the raw material that is practicable, so that each piece receives close and careful inspection, and the machine as a whole goes from our hands bearing the stamp of honest endeavor, and is sold on the following broad and liberal

WARRANTY.

We warrant our machine to be made of good material, and well finished; to do the work for which they were intended in a good and workmanlike manner.

If they fail thus to perform, the agent of whom the purchase is made, or ourselves, must be notified within 10 days therefrom, and if, upon a second trial, under the supervision of the agent, it fails thus to perform, it may be returned, and the purchase money, if any, will be refunded; but if notice of difficulty is not received as above stated, it shall be conclusive evidence that the machine is accepted.

PLEASE READ.

To prevent any misunderstanding in regard to the above warranty, and avoid any dispute as to the price and terms of sale, all purchasers should demand of the agent a duplicate of the order, in writing, properly signed by each.

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We Manufacture

Hoe Drills
Disc Drills
Shoe Drills

Both Plain Grain and Combined Grain and Fertilizer.

Broadcast Fertilizer
Distributers.

One Horse Corn Drills

Hoe, Shoe and Disc, Plain and Fertilizer.

Write for Catalog and Information.

It's no trouble to answer questions.

EMPIRE DRILL CO.

Division,
SHORTSVILLE, NEW YORK.

